



UNIVERSITY OF ALBERTA

folio

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Gateway shrinks as U of A advertisers pull out

HUB Mall and Bookstores look to spend advertising dollars elsewhere

By Lucianna Ciccocioppo

U of A advertisers are canceling contracts with the student newspaper, *The Gateway*, because of its editorial content. Editor-in-chief Rose Yewchuk confirmed the newspaper lost the Hub Mall and Bookstores contracts because of offensive content. As a result, *Gateway* has fewer pages.

"Revenues are down as a whole," says Yewchuk who links the downward spiral to the high turnover of advertising representatives the newspaper has had. "Ultimately, I don't think it's our content that's a problem. I don't think *Gateway* is of poor quality." Yewchuk says there are two new people working in sales and they are still developing strategies.

Teresa Chambers, head of marketing at HUB International Marketplace, says it has become increasingly difficult to sell advertisements in *The Gateway*. Chambers says the mall has many merchants of different religious and cultural values and she cannot justify advertising in the student newspaper. While she admits the newspaper seems to have recently cleaned up, a recent 'joke' issue forced HUB to ban distribution of the paper in the mall. Meanwhile, she says she tells merchants to advertise in *Vue Weekly* instead, an alternative paper published in Edmonton.

Someone else unhappy with the level of swearing is advertising representative,



Arts student Carrie Sutter with a copy of *The Gateway*

Blake Johnson. "It makes my job really difficult. If the words are context-appropriate, I don't have a problem with it. But if you're swearing for swearing's

sake, what's intelligent about it?" Johnson says until U of A students make it clear they want change, it will be difficult to change the editorial content of the

student newspaper. "Our goal is to make it better. What can we do to help them make better decisions?"

Bookstore director, Julio Picheca, says due to a reduced advertising budget this year, the Bookstore is "being selective...and looking at other vehicles for advertising."

Student president, Steve Curran, says the situation is under review. Curran says the decline in ad revenue has been occurring for the last several years. "This did not happen overnight. *The Gateway* did not suddenly become 'anti-advertiser,'" says Curran. Still, a motion at a recent student council meeting to change the by-law and make the newspaper a 16-page publication as a minimum was defeated. Curran says council was not convinced student dollars should regularly prop up *The Gateway* in order to save pages.

He would like to see greater feedback, and more teeth, given to the *Gateway* Advisory Committee, made up of the students' union, students-at-large, and members of the off-campus community, including media people.

"The 'joke' issue is supposed to run through the committee before it's published. And it hasn't gone through."

Meetings with *Gateway* staff, the students' union, HUB and the Bookstore are ongoing. ■

A Hiker's Guide
to the
Northern Plains

UNIVERSITY OF ALBERTA BOOKSTORES

A HIKER'S GUIDE TO THE NORTHERN PLAINS

by Ken Ludwig, only \$19.95

Joe Clark returns to his alma mater

U of A and Carleton will provide former prime minister with a home to write about his career and related public policy issues

By Michael Robb

In 1959, the editor of *The Gateway* travelled to Quebec City to attend a national conference of the Canadian University Press—a loose organization intended to provide an exchange of news among student newspapers. The delegates decided to set up a permanent news service and approved a Charter of the Student Press delegates hoped would protect student newspapers from the threats, pressures and censorship by university administrators and faculty.

Joe Clark was a strong supporter of the news service and charter, arguing it would promote national unity and understanding. Prophetically, he argued that universities must establish national organizations in order to combat stifling provincialism.

Almost four decades later, the former prime minister and external affairs minister is returning to his alma mater—a university with a national perspective and one that slowly, but surely, rejected the “stifling provincialism” Clark had criticized four decades earlier. He won’t be resuming duties as *The Gateway* editor, however. Instead, he will take up duties as an adjunct professor in the Faculty of Arts. He will also be an adjunct research professor in Carleton University’s School of Canadian Studies.

The two universities have collaborated to create The Canadian Community Project: Collaborative research related to the life and career of the Right Honorable Joe Clark. The former Prime Minister will focus on three areas: Clark family history in High River, Alberta; an autobiographical and biographical study of his own life; and an examination of the key themes in the evolution of Canadian attitudes about

Canadian government, politics and foreign policy during Clark’s time in government.

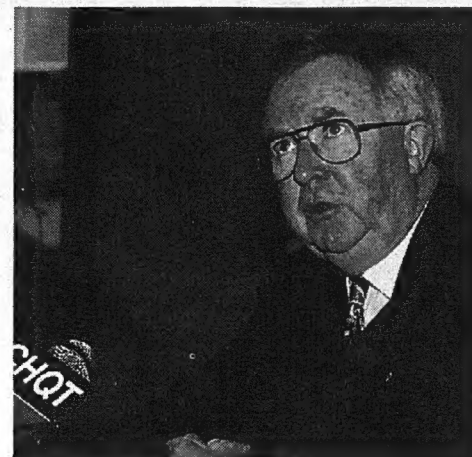
Faculty and graduate students at both universities will work with Clark. Both universities will provide Clark with a research assistant. History professor Dr. Paul Voisey, an expert on southern Alberta, will work with Clark on a book about High River.

History professor Dr. David Mills says Clark will also work with academics to explore in depth issues such as the roots of free trade and foreign policy issues during Clark’s time in government. Clark acknowledges he may not always like what emerges from this kind of collaboration, but it will inform students of history and political science. A grant application to the Social

Sciences and Humanities Research Council will be made to support the project.

Clark has a long association with the U of A earning a B.A. here in 1960 and an MA in 1973. His father studied liberal arts here as well. Clark was a lecturer for the political science department in the mid-’60s and was awarded an honorary LLD in ’85. While a student, he was vice-president of the campus conservative club, editor of *The Gateway*, was McGowan Cup debater and twice the national president of the Progressive Conservative Student Federation.

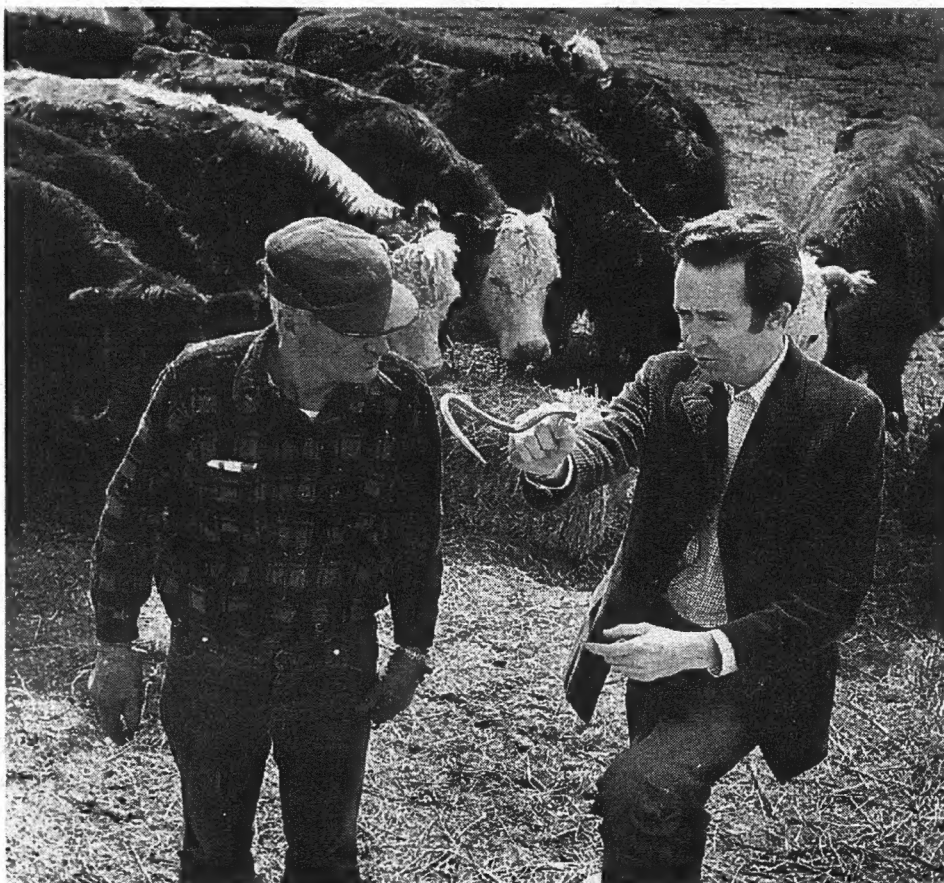
His political career was meteoric. On campus, he was a vocal critic of the provincial Social Credit government, organizing a demonstration on the steps of the



Legislature to lambaste the Socreds for a lack of funding for new student residences. He was involved in the rise of the Progressive Conservatives under Peter Lougheed, and narrowly missed winning election to the provincial legislature in 1967. He turned to federal politics, working as a special assistant to the Honorable Davie Fulton and later Robert Stanfield following the ’67 leadership convention.

He tried his hand, once again, at electoral politics, this time in 1972 wresting a federal seat away from a Liberal incumbent in the Rocky Mountain riding. Six times he was elected to the House of Commons. In 1976, the dark horse candidate won his party’s leadership when Robert Stanfield bowed out. Three years later, he was in the prime minister’s residence, 24 Sussex Drive, the youngest prime minister in Canadian history. But his minority government didn’t last a year, and once again Clark found himself on the opposition benches.

When the Tories returned to power in 1984 under Brian Mulroney’s leadership, Clark was appointed Secretary of State for External Affairs, where he served admirably from 1984 to 1991. In the early ’90s, he became minister responsible for constitutional affairs. ■



A young Joe Clark visits an Alberta rancher

MRC grants bring mix of elation and disappointment

By Lee Elliott

The hallways were a mix of three parts disappointment and one part elation with the announcement of the recent round of Medical Research Council of Canada (MRC) grants.

Twenty-five per cent of U of A projects were funded, comparable to other years, says Dr. Robert Crawford, acting director of the Research Grants Office. It’s also above the overall MRC success rate, the lowest in its history at 19.6 per cent. This leaves 322 Canadian projects, which meet international standards of excellence, not funded.

Success varied across the country. The University of Toronto matched the U of A’s 25 per cent rate, while *UBC Reports* says University of British Columbia is launching a letter-writing campaign after 30 UBC projects funded last year received no money this round.

Dr. Moira Glerum was one of the elated 25 per cent at the U of A. She describes herself as “ecstatic and incredulous,” to have received \$82,000 annually for the next three years plus a \$38,000 equipment grant. This will enable her to keep her research assistant and graduate student working and “really get going on all the things I think are important to do right now.” Glerum joined the U of A Department of Medical Genetics in May. She’s researching the little-understood assembly of enzyme cytochrome oxidase, the last of the series responsible for generating energy in mitochondria and the one

most often defective in neurodegenerative diseases.

But her elation is tempered. “I’m totally excited and then I feel bad in a way. I look at my colleagues who didn’t get funded.” Laying off technicians is part of the process, she says. “You just feel the morale. It’s sinking so low.”

She said her own heart sank January 14 when the MRC issued a news release announcing the low success rate and saying even successful grants were cut an average of 25 per cent the recommended amount. She was sure she wouldn’t get money. “It’s a combination of hopelessness and saying, well I just have to keep trying.” She and other colleagues spent the next few days scouring the MRC Website for news.

A colleague found her name, leaving her on a definite cloud nine, she says. “But nothing we do is secure. In two-and-a-half years I’ll be going through the mill again and worrying about the same things again.”

For Dr. Diane Cox, chair of the Department of Medical Genetics, the MRC decisions were “devastating and short-sighted. I’m very disturbed about it,” she says. Several genome-related projects were not funded. Of the genome-related applications for appointments to the department, or cross appointments with other departments, two out of two were not funded. In the general applications, only one of five was funded.

“That’s really a modest concern,” says Cox. The real issue is that the government has expressed a belief in biotechnology and isn’t backing it with money. Judging from responses to her letter-writing campaign, she says politicians seem to think commercial interests will pick up the shortfall. This ignores the important contribution of basic research, she says. It will also lead to a shortage of trained professionals for the very biotechnical industries the government thinks will carry the ball.

The effects on the medical genetics research are devastating. “It means you just bring it to a close,” she says. “You just get rid of the post-docs and the technicians . . . either you tide them over, or they go.” When they go, it’s usually south to the U.S. where there is funding. New post-docs and graduate students aren’t even considered.

“You can’t turn this [research] on and off like a tap,” says Cox. “You lose so much, even if it’s a temporary down . . . It’s very difficult to stay competitive.”

When only 40 per cent of well-established researchers are getting funding, the future is in trouble, says Cox. “The people of Alberta and the people of Canada should know what’s happening to their futures.” Future health care and the biotechnology industry depend on research funding.

“I think the biotechnology industry has to realize the danger and get the message to the politicians,” she says. ■

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University
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...it makes sense

Here's looking at me...and me...and me....

The cloning controversy: science of possibilities or of madness?

By Lucianna Ciccocioppo

You know the scenario: you meet some remarkable person and think to yourself, "They certainly broke the mould when so-and-so was made." Well ... maybe not if American scientist Dr. Richard Seed gets his way. He wants to set up human cloning clinics, not in the distant future but in the next couple of months.

Imagine another you in the world, another Pierre Trudeau, Bill Gates, Karen Kain ...or Saddam Hussein?

Seed, who has a PhD in physics from Harvard, attracted international media attention and public condemnation earlier this month when he announced his plans to immediately begin work on a human clone. The Chicago-based scientist says he has done fertility research in the past and wants to clone babies for infertile couples. In an interview with CNN, Seed told the world, "My target is to produce a two-month pregnant female [within the next 18 months]."

His goal is to establish profitable world-wide human clone clinics. U.S. President Bill Clinton is trying to stop him, but Seed says if the U.S. isn't welcoming, he'll simply head elsewhere.

Is this madness or a matter of getting used to the progress of science? Seed believes the opposition to human cloning will "blow over" much like the initial controversy over test tube babies. As an editorial stated in *New Scientist* magazine recently, "Dolly is out of the bottle and she isn't going back in."

HELLO, DOLLY!

Dolly is the world's most famous sheep. Edinburgh scientists from the Roslin Institute and pharmaceuticals company, PPL Therapeutics, cloned Dolly from a single cell taken from the udder of a six-year-old ewe. She's the first mammal created from the non-reproductive tissue of an adult animal.

The failure rate in the complex cloning process is extraordinarily high. Dolly was the only lamb born from 227 fusions of oocytes with udder cells. Researchers fear human cloning attempts will result in numerous miscarriages and abnormalities. While human cloning is banned in Britain and in Germany, there's nothing on the books so far in Canada or the United States.

"PEOPLE ARE NOT SHEEP"

"This flies in the face of what the public wants," says Dr. Diane Cox, professor and chair of medical genetics. "I have a hard time imagining why anyone would want to do this." Cox argues research dollars are better spent helping scientists eradicate diseases in humans, not make carbon copies of them. "With such a shortage of research dollars, it's irresponsible to fuel dollars in this direction."

Dr. Heather McDermid, associate professor of biological sciences, says it is too soon to use the infertility argument when there are other, better reproductive tech-

nologies. Since Dolly is the first generation of clone, she questions the long-term consequences. "We just don't know. The results of this may not be known for generations."

There are other concerns, such as defective cells and susceptibility to disease. "A cell contained in the body may have undergone mutations, and it only appears occasionally, like cancer," says McDermid. Cox says a whole herd of animals genetically similar means a bacterium affects all of them. "There are no differences in adapting to disease, which is very important in humans."

And just because a technique is successful with animals doesn't mean it will work in humans. "People are not sheep," says McDermid, who questions where Seed will find women to participate in his research given all the technical problems experienced with creating Dolly. "He can't go around experimenting with 227 women and hope for one to work."

Both professors agree the infertility arguments are weak. But cloning animals,

on the other hand, has merit. "It's useful in the agricultural area, where scientists are trying to make the perfect animal for meat producers," says McDermid. Or to create a human protein in cow's milk, says Cox, instead of trying to get it from human blood. "This is of real value to humankind."

Indeed, this is already occurring. Scientists in the U.S. have successfully cloned genetically customized calves and want to use this technique to have cows make human serum albumin. Albumin, a blood protein that regulates the transfer of fluids in the body, is critical to people suffering from liver disease, malnourishment, extreme burns and other conditions.

What purpose, then, does human cloning serve? To fill the void of a deceased loved one, fulfill the ego and perpetuate life for a wealthy industrialist, or supply much needed organs to patients? These are the big ethical dilemmas swirling after Seed's announcement. "It confirmed some of our worst fears about science and cloning in general - that it can't be stopped,"

says Tim Caulfield, research director of the Health Law Institute. Caulfield says education is part of the process, not just blunt laws banning all research. "We have to look at the nature of the concerns, ask ourselves are they justified and find ways to meaningfully regulate this," he says.

Contrary to popular belief, a human clone will not be identical to its genetic donor. While they share a genetic blueprint, the clone will also have some genes from its mother. More important, the environment, both in and outside the uterus, will shape the individual. Think of it as identical twins raised apart. That means there will never be another you, another Elvis, or another Hitler.

"The clone will be a unique individual, with unique experiences and will develop a unique personality. It will have all the legal rights of any individual," says Caulfield. Indeed, Caulfield argues, if society allows itself to produce clones to supply an army or organs, then cloning, in essence, is the least of our worries. ■



Tina Chang

Students shore up against poverty—and the cold

By Deborah Johnston

It was a long, cold night. Still, a dozen students bundled up and spent the night in a tent as a gesture of solidarity with homeless people. "There are a lot of people out there who don't have the amenities that the rest of us have," says engineering student Paul Adema, "and I think it's easy to lose touch with that... It's important to raise awareness that there are people out there who need help."

"It was an experience," says Heather Smith, "About midnight we all got fed up and crawled into our sleeping bags. It was a group effort. We made sure everyone had enough clothes, enough socks and sleeping bags and we took turns sleeping...the guy sleeping next to me complained the whole night, 'I'm so cold!'"

The students are members of the Campus Chapter of Habitat for Humanity—a non-profit housing association with chapters and affiliates in 50 countries. (The University of Alberta is the first major Canadian university to support Habitat for Humanity by establishing a campus chapter). Each year, Habitat for Humanity builds homes for selected needy families, who are expected to put in 400 hours of sweat equity. "It's a hand up, not a hand-out," says Lynn Labbe, president of the Campus Chapter Habitat for Humanity. The new home is appraised by the bank and mortgaged interest-free to the family at 90 per cent of the appraised value.

"When you don't have your basics elements taken care of, your food, clothing and shelter, it's a pretty miserable existence," said arts student Jody Vogelzang. She hopes other students will support Habitat for Humanities Collegiate Challenge urging all university and college students to raise enough funds to build 100 homes by the end of 1998.



Arts Student Heather Smith

"It was a real eye-opener... I think if you were out on the street and you had to live like this, it would be a real challenge to stay warm and to make sure that you did survive."

—Faculty of Arts Student Heather Smith, after spending the night in a tent to raise awareness for Habitat for Humanity.

In all, the chapter has raised more than \$600. President Lynn Labbe said donations were the secondary reason for the campaign, however; awareness was first. "We wanted to make people talk about the need for decent housing both in Edmonton and around the country."

"There are 35,000 people on campus," Labbe says, "and if we each donated the price of a coffee once a year, there's a house. If we did that once a semester, we'd be well on our way to building two houses a year." ■

U of A works with University of Chile on resource taxation policy

U of A President Rod Fraser signed agreements with the University of Chile Thursday for cooperative academic ventures between the two.

Dr. Jamie Lavados, Rector of the University of Chile, signed for that country's largest university formalizing the academic linkages. The two universities are already actively cooperating and organized a conference last week focusing on the restructuring of Chile's natural resource taxation policies.

That the University of Alberta and the University of Chile are working together towards a more transparent natural resources taxation regime for Chile will benefit both countries tremendously.

—President Rod Fraser

The conference sponsors included Chile's Central Bank, and the Chilean Copper Commission and drew representatives from government, industry and universities, including four U of A professors.

Speaking from Chile where he is travelling with the Team Canada trade mission, Fraser said he is delighted with the initiative. "Canadian companies have significant investments in Chile's mining resources. That the University of Alberta and the University of Chile are working together towards a more transparent natural resources taxation regime for Chile will benefit both countries tremendously." Other promising areas of collaboration between the universities include graduate student exchanges, language studies and educational systems development. ■

Nursing student gives more than she receives

Fairview's Melanie Willsey amazed at the generosity of people

By Michael Robb



Melanie Willsey: Living the maxim: It is better to give than to receive.

This time, Melanie Willsey is on the receiving end. The 19-year-old Fairview student is receiving the Faculty of Nursing's Dean's Citation, \$2,500 per year for a total of four years—funded by a private donation—along with several other provincial, faculty, university and community scholarships. Willsey is more accustomed to giving, however, than receiving. When a child in Peace country needed an experimental liver operation, for exam-

ple, it was Willsey who helped organize a fund raiser to cover the family's costs to travel to a southern California hospital. For two years, she helped organize the student fasting fund raiser for World Vision. She helped organize the collection of shoe box gifts for needy children. She was involved in her Fairview church's youth group. She served as a high school representative and then secretary on the high school student council. And in the summer of 1994, she participated in a missionary trip to Botswana. "You could always count on her," says Fairview High School vice-principal Jim Clevette. "She's a good solid student, with a good mind. She's a logical thinker who learned very early on how to manage time. She was a tremendous person to have in our school." Now, Willsey is a U of A student. Off-campus, she's found a new spiritual home, a church where she is—not surprisingly—giving to help others. Every second Friday,

she helps provide meals to people who live on the streets of Edmonton. Like her parents—her father is an agrologist and her mother is a teacher—Willsey chose the U of A. "I didn't think seriously about nursing until Grade 11 or 12. With my marks [her averages in the last two years of high school were in the mid-90s], I felt a little pressure. Some people said they expected big things of me." Clevette explains: Someone asked Willsey, Why nursing? You could go into medicine. But Melanie didn't think she could help people as much in that profession. "That's the kind of person she is." She says she was particularly attracted to Nursing because it is a "helping profession". Willsey chose the U of A for several reasons: proximity to friends and home, its generally good reputation, the support the institution is giving her and general familiarity with the place—she was in the Women in Scholarship, Engineering, Science and Technology summer research program in 1996. She's been overwhelmed by people's generosity. "People are amazing, and I don't take that for granted," says Willsey. "I'm thankful to receive such an honor...and yet saying thank you seems so insufficient." She has been pleasantly surprised that the U of A isn't as impersonal as she thought it might be. The faculty's

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new program has helped. Her learning/study group has become an immediate support group. The professors really do care that students do well and there are many services available for students. She's already looking beyond university years; Willsey says she wants to be a missionary nurse in Africa. But, she says, if she stays in Canada, she'd like to work with mothers and babies. ■

- Melanie Willsey: Scholarships and more scholarships for 1997/98
- Academic Excellence Scholarship
 - Dean's Citation in Nursing
 - Peo Memorial Scholarship
 - Peace River Pioneer Memorial Scholarship
 - Isobel Secord Memorial Entrance Scholarship
 - U of A Laptop Computer Prize

»» quick »» facts

Pope's Cuban visit will ease, not eliminate tensions

By Dr. Fred Judson
Associate professor political science

In the first years of the Cuban Revolution, relations between the Catholic Church and Fidel Castro's government were disastrous. The mutual hostility, expressed both in the Revolution's official Marxist atheism and in the counter-revolutionary activity of some of the Church hierarchy, was complicated by Cuban society's relatively secular attitudes and by the presence of lively and popular Afro-Cuban religions. For more than twenty years, though, there has been dialogue. As liberation theology developed throughout Latin American, it sought to engage with Cuba, while Marxist revolutionaries and secular democrats

stepping down, political freedoms on the Western model, the Cuban government saying it has had it all wrong since 1959. Even less will the expectations of U.S. Senator Jesse Helms and the more strident elements of the Cuban-American political lobbies based in Miami be met. Nor will the Pope's presence in Cuba make the U.S. move towards normalizing relations.

But what we have reason to think is that the visit will occupy and expand the political space for further developments. Both the Church and the Cuban government stand to gain more room in their relations with each other. Christmas and other Christian holidays will have a higher profile, remaining restrictions on individual Cuban Catholics will be relaxed; the Church will speak out even more about the material hardships Cubans are undergoing, even explicitly blaming the U.S. trade embargo.

Certainly, to the degree that Cuba has to deal with

criticism from the rest of Latin American and the Caribbean, the Pope's visit will relax some of those tensions. At the same time it will also stimulate those voices who wish to push Cuba towards their versions of democratization and market relations—but they will be talking to Cuba, not shouting at it.

The core of the visit's meaning for North Americans pertains to U.S. policy. Here again, it's the expansion of political space which matters, and it is not necessarily a situation of direct correlation: If the Pope can go to Cuba, why not Jesse Helms or Bill Clinton? It doesn't work that way.

But a U.S. president who was not enthusiastic about the Helms-Burton legislation, who is actually obstructing its application, who is increasingly pressured by very powerful U.S. business interests to move towards some kind of normalization, may very well welcome the space the visit provides. With the Pope's visit, the balance of power within the Cuban-American community can also shift towards flexibility and tolerance, thus reducing the disproportionate attention to strident lobby voices at election time. It would be refreshing to see the U.S. take some initiatives perceived as positive within Cuban government circles.

The real beneficiaries of expanded space are ordinary Cubans, who for the most part support their government and President Castro, who work hard, who feel proud to be Cuban while lamenting the material hardships of the 90s and who believe the normalization ball to be mostly in the U.S. court. Curious and excited by the many significances of the Pope's visit, they are too experienced, resilient and cautious to burden it with unmeetable expectations. But they will be the ones to move into the space created, the ones to take Cubans into its future.

CBC Radio "Commentary" aired January 21 on Edmonton A.M. ■

The papal visit is the culmination of a decades-long process, but we should not expect, whatever the Pope may say in Cuba, that the visit will achieve what U.S. policy has not... —Fred Judson

struck up political alliances with Christians. Very astute Vatican representatives in Cuba maintained communication links with the government, including Fidel Castro. The Cuban Communist Party now admits believers as members, normal religious ceremonies are permitted, and no longer are believers discriminated against in education and employment.

So the papal visit is the culmination of a decades-long process, but we should not expect, whatever the Pope may say in Cuba, that the visit will achieve what U.S. policy has not: multi-party election, full-blown capitalist market relations, Castro

folio letters to the editor

Catching crows—in the name of research

I am writing a follow-up to the letter on Professor Rowan in the last edition of *Folio*, "Cover Boy is William Rowan."

Like thousands of others, my dad left school in the middle of the Depression. My father and his friends caught young crows and sold them to Professor Rowan for his migratory studies. As I recall, the going price was a nickel a crow. Good money in bad times!

His son and granddaughter are graduates of the University of Alberta and hold post-doctorate degrees from universities in England and the United States. The University of Alberta gave my family an opportunity that you won't read about in a Maclean's survey. The university has many stories large and small to "crow about" in this anniversary year.

Howard Welch

Company loyalty replaced by collectives of entrepreneurs

By Dr. Christopher Levan
Principal, St. Stephen's College

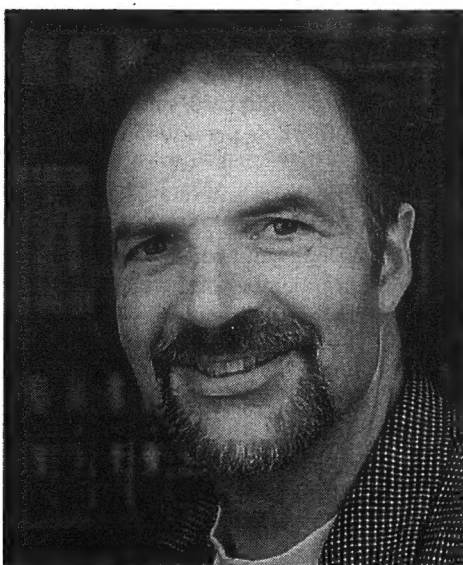
Here's the all too familiar scenario. Ray is a "golden watch" employee. For over 30 years, he has given everything to his company—the best years of personal energy and intellectual insight.

All right, let's be honest. Of late, he can't compete on the efficiency scale with the young up-starts arriving from university. But at two score years and ten, surely his wisdom and experience count for something in this volatile, market-driven world.

Last week, Ray was cut loose. Another victim of company policy. Downsized, rightsized, permanently outsourced, expendable—whatever the current jargon, he's now looking for work. The lack of salary for Ray presents a long-term dilemma, but the real issue is what he feels. The organization that took the finest he had to offer now considers him redundant.

On reflection, his sense of failure is compounded by the fact that his recent performance was exemplary. He and his company were making record profits. How does it happen? Double digit returns on investment and he still loses his job.

How is that for a kick in the self-esteem?



Dr. Christopher Levan

Apart from the pain we feel for him, Ray represents a frightening and critical problem. The economic contract is unravelling.

In the past, it was an unspoken but binding covenant that if an employee arrived at work on time, gave it the "college try," accomplished what was asked, avoided dalliance of a fraudulent or sexual

nature, and remained loyal to the boss, they kept their job.

That may sound simplistic, but the majority of people who live and work in this province depend on that principle.

Alas, this axiom no longer holds true. In the ivory towers of industry, a new ethic is being invented—the tyranny of profit. Stockholders, mutual fund managers, and other globe-trotting money moguls demand superlative returns for their investment. There is no such thing as a "decent" profit any longer. The only acceptable dividend is the highest one.

I make no pretence to understand the finer points of economic activity, but it does strike me as ironic that the greed of this generation of investors is causing a shift in priorities which, in turn, is undermining the very security we seek. The "Rays" of this world are the victims of an insatiable appetite for an increase in wealth.

His case poses two problems which the university might well try to address. First, how do we re-establish the economic contract? As many CEOs will admit, company loyalty is a thing of the past. If there is no assurance of keeping a job by dint of hard

work and high achievement, how do we motivate employees to give their best when the pursuit of excellence only goes so far? On what is the employer-employee relationship to be based?

Some analysts suggest that what appears to be emerging is career-based motivation. Each worker has to look to his or her own ambitions for inspiration. Almost like sub-contractors, their loyalty is first and finally to themselves. No more team work. We now have collectives of self-employed entrepreneurs.

Is that healthy? Is that what makes for long-term profitability and financial stability?

The second issue is more spiritual in nature. How does one confront the drivenness of avarice which has captured the imagination of the wealthy? In a privatizing culture where the shop floor or office tower no longer provide a community of compassion, how do we provide for the sense of security and belonging sufficient to overcome the drive to hoard our riches?

While I have no answers, perhaps the beauty of the university is that we can still fulfill our side of the economic contract by asking good questions. ■

Hot off the University of Alberta Press

Plant field guide, Cree language resource and an analysis of risk of death in Canada—three new books

TITLE: THEIR EXAMPLE SHOWED ME THE WAY: A CREE WOMAN'S LIFE SHAPED BY TWO CULTURES

Author: Emma Minde; Freda Ahenakew and HC Wolfart, ed. and trans.
Price: \$24.95 soft cover

Emma Minde's autobiography describes how she left her Saddle Lake home to join a household of strangers at Hobbema—her future husband and four powerful adults who shaped her life: her husband's parents, Mary-Jane and Dan Minde, and Dan Minde's younger brother Sam and his wife Mary.

The autobiography focuses on her relationship with Mary-Jane and Mary, and the reminiscences offer rare insight into a life guided by two powerful forces: the traditional world of the Plains Cree and Catholic missions. Rarely has the interplay of these two worldviews—often in conflict, yet often, it seems, very much in harmony—been sketched so eloquently.

The education Emma received was based on obedience, hard work and firmly held beliefs, seen as essential preparation for a life of uncertainty and rapid change, hardship and constant struggle. Her stories are presented as she told them in Cree to Freda Ahenakew, with a translation into English on facing pages.

TITLE: PLANTS OF KANANASKIS COUNTRY IN THE ROCKY MOUNTAINS OF ALBERTA

Author: Beryle Hallworth and CC Chinnappa
Price: \$19.95 soft cover
Publisher: The University of Alberta Press/The University of Calgary Press

This book is a timely contribution to the understanding and enjoyment of Kananaskis Country flora, providing visitors—whether botanist, conservationist, naturalist or tourist—with detailed information on more than 400 species. The book includes wildflowers, trees, shrubs, ferns, some grasses and conspicuous sedges and rushes. According to James Soper, a curator emeritus and research associate with the Canadian Museum of Nature, the

book's authors have produced a field guide that combines a number of original features and bridges the gap between a simple picture guide to wildflowers and a purely scientific account of the flora.

The plant families are described and most are illustrated with a color photograph. Diagnostic keys may be used for identifying an unfamiliar plant to its family, genus and species. An illustrated glossary contains diagrams of the structure and arrangement of leaves, inflorescences, flowers, fruits and seeds.

TITLE: RISK OF DEATH IN CANADA: WHAT WE KNOW AND HOW WE KNOW IT

Author: Simon Thomas and Steve Hrudef
Price: \$19.95

Hrudef and Thomas note a major shift in what kills us. "Our ancestors faced enormous obstacles to survive the rigors of our climate and wilderness and the scourges of infectious disease. Recently,

we have experienced a well-documented transition from acute diseases as a major cause of death to the dominance of chronic diseases such as cancer and cardiovascular disease," the authors write.

Targeting their book at students in the health sciences and professions and practicing health professionals, Hrudef and Thomas have provided a summary of accessible health risk information—in effect, detailing who dies from what in this country.

"We seek to inform anyone who wishes to understand our state of knowledge about risks of death in Canada," they say. "In so doing, we believe we can encourage informed discussions about important issues in our society. However, this book should not be used as a weapon to win battles in risk debates. The most contentious issues in risk debates are usually social issues of equity and fairness, issues which cannot be resolved by recourse to the data and inferential logic that we present." ■

The conscience of a university

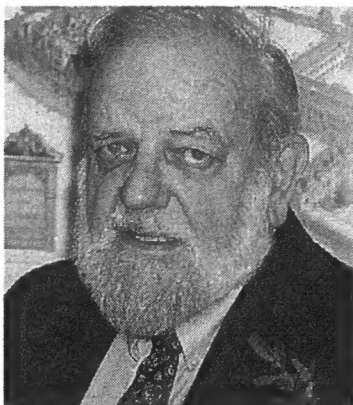
A centre is named for the kidney transplant pioneer who brought ethics to the fore at the U of A.

By Michael Robb

It was one of those bittersweet moments in the history of the University of Alberta: A time to celebrate the official renaming of the Bioethics Centre to the John Dossetor Health Ethics Centre in recognition of a man who made a difference. But it was also a time to say goodbye to one of this U of A's—one of Canada's—most influential medical ethicists.

Earlier this week, friends and relatives paid tribute to a man many on this campus say changed their lives. "I worked with John for 10 years," said the centre's co-director Dr. Vangie Bergum. And he was a man of integrity, humility, curiosity, energy and availability.

"John has been a great mentor to me," said Dr. Paul Byrne, who credits Dossetor with encouraging him and coercing him—in an ethical way—to get involved with the Centre. "I owe a great deal to John."



Dr. John Dossetor

"The interdisciplinary nature of the work here has been particularly important," recalled Dossetor, who will now move to Ottawa with his wife Margaret to be closer to family.

"When I was in medicine proper I didn't know people outside of it. I didn't know lawyers or philosophers." But, he explained, that changed when he became increas-

ingly interested in the field of ethics. That shift allowed Dossetor to expand his mind, to become deeply committed to the field. The U of A's sabbatical system was very important in allowing him to do that.

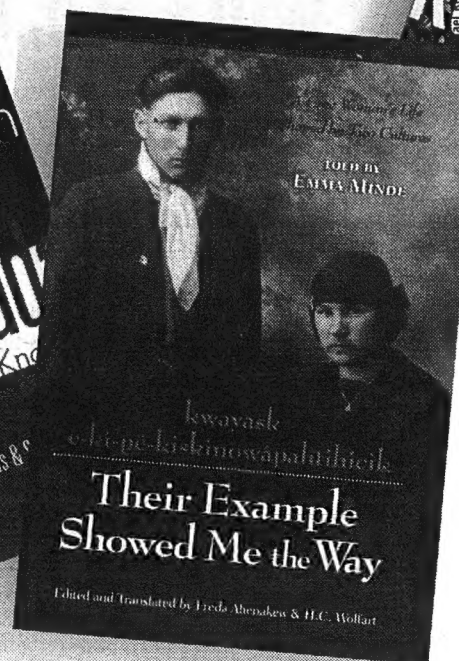
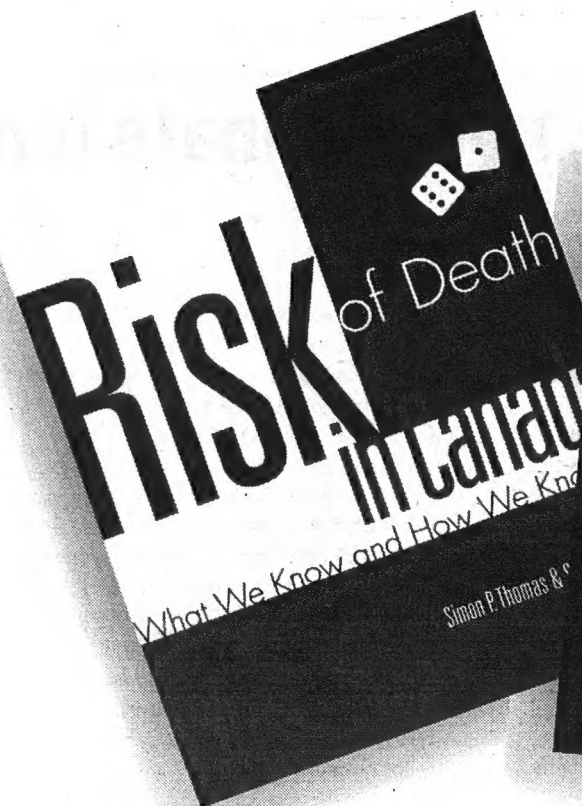
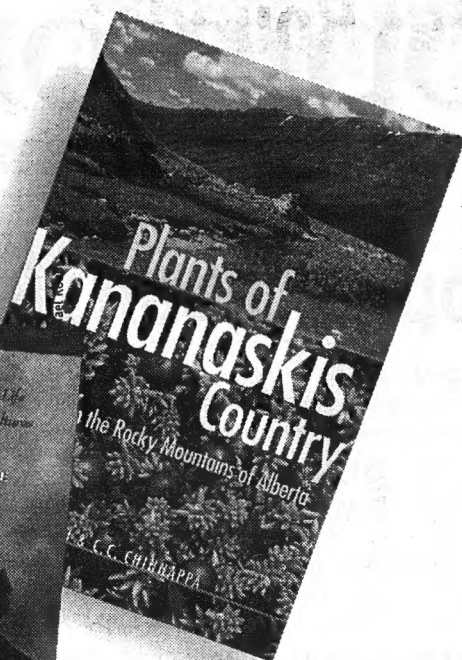
Dossetor was instrumental in keeping the Bioethics Centre alive, particularly during its early years. Nursing Dean Dr. Marilyn Wood said the centre survived in spite of the lack of support from the university in its early days. And now, she said, the centre is a truly interdisciplinary centre—rare in North America. That interdisciplinary and broadened focus was

appreciated and so was Dossetor's leadership, especially during the difficult period of restructuring health care, said the Capital Health Authority's president Sheila Weatherall.

Dean of Medicine and Oral Health Sciences Dr. Lorne Tyrrell reminded Dossetor's friends and colleagues that Dossetor was a member of the team that performed the first kidney transplant in Canada at McGill University in 1958. "Today, based on John's pioneering work, hundreds of kidney transplants are done on a routine basis."

That kind of work lead inevitably to Dossetor's interest in medical bioethics, explained Tyrrell.

Following a one-year sabbatical studying bioethics at the University of California, the University of Montreal and the Hastings Centre in New York, Dossetor returned to launch the joint faculties bioethics program at the U of A. Dossetor and his colleagues became responsible for bioethics teaching at the undergraduate level, publishing a bioethics newsletter, developing joint-clinical ethics seminars for residents and nurses and introducing a graduate course in health-care ethics. ■



Bursary program to help students make ends meet

Details being worked out by institutions and government

By Michael Robb

Details are sketchy, but indications are that post-secondary institutions will have significant input into how the provincial government's recently announced bursary program is structured.

Meetings between U of A and Advanced Education officials have already taken place, says the University's Government Relations director Jim Rivait.

The U of A, in its submission to the Growth Summit hearings, urged the province to establish a matching bursary program. Students also lobbied hard for more student support. "That's often how change occurs within government, as it responds to pressure from many groups," says Rivait.

Advanced Education and Career Development minister Clint Dunford said students and their families told him they were concerned about education costs, particularly student debt. "This partnership encourages government, the private sector, and post-secondary institutions to work together for high-need students."

The Alberta Opportunities Bursary is a \$30 million program. The province will match up to \$15 million a year raised by the institutions to provide bursaries. Each year, up to 15,000 first- and second-year students could receive between \$1,000 and \$3,000, based on need. Institutions are expected to offer the first bursaries for the fall 1998 term.

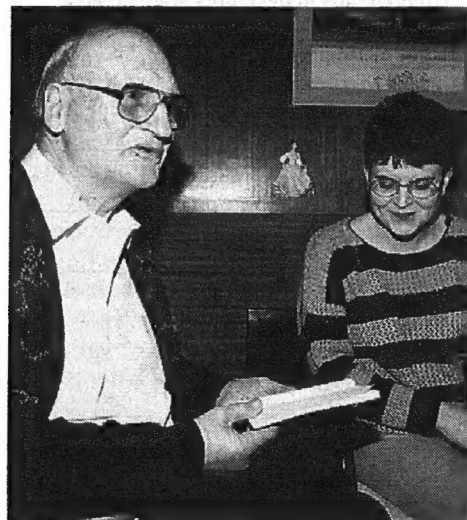
The money will be targeted first to those who meet student loan criteria. That generally includes single parents, married students with families and students with higher costs as a result of the need to relocate to attend school. Full-time students in their first and second year will be eligible.

The University's chief fundraiser, Dr. Terry Flannigan, associate vice president (external affairs), said the program couldn't come at a better time. "It's a start, but we really do need more specifics to find out what it means." Flannigan said he hoped some of the matching money could be placed in endowments so students would benefit over the longer term. ■

"Bus Rounds"

Medical education hits the road and covers a lot of ground

By Lucianna Ciccocioppo



Patient Kenneth Myers

There's nothing unusual about seeing a bunch of people huddled in one area, bundled up to their eyeballs and waiting for a bus on a frosty Edmonton winter morning.

Look past the exhaust and ice fog, however, and you'll notice this is no ordinary bunch. And there's no bus pole in sight. This bus is idling outside the main doors of the Grey Nuns Community Hospital and Health Centre. And it's picking up doctors, nurses and medical students for their Tuesday morning "bus rounds."

It's a program unique to Edmonton. Every two weeks, from September to June, bus rounds take these health-care professionals out of hospital hallways and into the homes of cancer patients. With home care increasingly replacing continuing-care facilities and hospital care, patients are spread throughout the city. How then do physicians and nurses participate in educational rounds when patients are no longer in one building? Easy, thought Dr. Eduardo Bruera, professor of oncology in

the U of A's Division of Palliative Care Medicine, we'll go to them. Bruera came up with bus rounds two years ago.

"We know the key to the delivery of good palliative care is education. The best way to educate people is based on patients in a home care environment," says Bruera. After a one year pilot project, bus rounds look like they're here to stay. "It's an opportunity to gain generalized knowledge in specific situations," says Bruera.

It works like this: a staff member selects patients willing to participate and maps out the bus route. In order to make optimum use of transportation time, journal articles and educational topics are chosen for discussion on the bus. Prior to arriving at each destination, the patient's history is outlined. After the consultation, which lasts 15 to 20 minutes, the group reassembles on the bus to discuss recommendations. The goal is to be as unobtrusive as possible for patients while still providing an educational round for health-care professionals. It's a chance to share ideas about treatments and services and ensure a consistent quality of care for all patients.

When Dr. Doreen Oneschuk first heard she had to hop on a bus for a round, she thought "Are you serious?" Now, the palliative care consultant is pleased with the success of bus rounds. "You get 10 consults for the price of one visit." It's a chance to see cases that are particularly interesting or have significant psychosocial problems, says Oneschuk, and learn about symptoms no one has ever seen before.

Patients also benefit from bus rounds in more ways than one. "A hospital is about control," says Sandy MacKinnon, manager of the palliative care unit at Grey Nuns. "Autonomy and self-determination

is something we try to build with patients and being at home is about total autonomy and self-determination." Dr. Bruera says it's a way of empowering patients on a one-to-one basis.

One patient who invited a round into his home is 72-year-old Kenneth Myers. Myers carefully prepared his living room for 14 visitors. Dr. Oneschuk led the talk and when asked about his pain control, Myers produced a little blue book. It's a diary of how he manages his pain and he shared it with everyone. For Myers, it was a chance to meet people he's dealt with on the phone. For the team, it was an opportunity to see how one individual is taking control of his life.

"I intend to conquer this," he tells the team, attributing his positive attitude to how he was brought up. "When you work

yourself at 70 years, to a 12 or 13 handicap in golf, you have to concentrate on winning!" he says to laughter.

A half-day of rounds can visit about four patients and cover three to eight journal articles. At \$250 a round, Bruera believes it's a cost-effective educational tool and would like to see the program reach people living outside Edmonton. He's already spreading his idea around the world, returning recently from a Latin American conference in Argentina where he organized three half-days of bus rounds.

"We hope to have the next international congress in a bus depot," he says with a chuckle. ■

Catch "Bus Rounds" on CTV's Success Stories, Wednesday, February 4, 1998 on the 11:00 p.m. newscast.



Dr. Eduardo Bruera (centre) with colleagues on the bus



Killam 1997/98

Research on pain, our gain

By Judy Goldsand

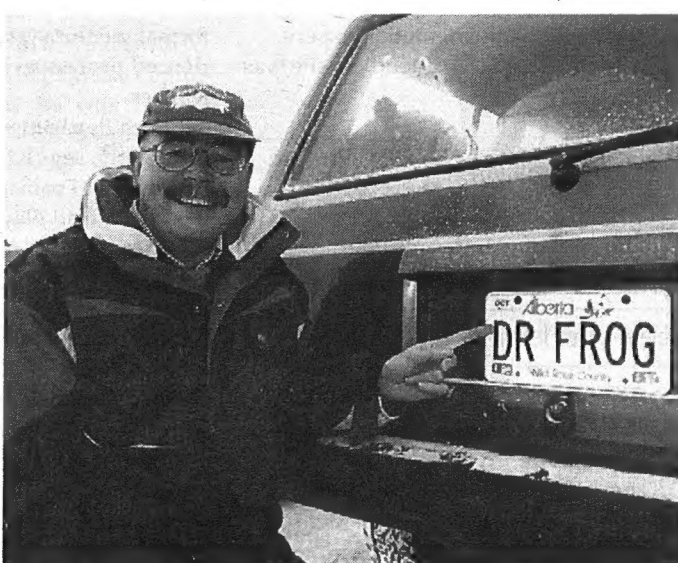
Pain is something we'd all like to avoid. Pharmacology professor Peter Smith hopes to help us do that. He's spending much of his Killam professorship year continuing the search for an understanding of pain in relation to nerve injury. "The practical application of about 70 per cent of my research," says Smith, "is the management of nerve injury."

Smith's research focuses on the autonomic nervous system—the body's control system. "If you were a computer, it would be DOS or Windows 95," he says. "The autonomic nervous system is what makes your face turn red if you are embarrassed, your heart beat faster when you exercise, or makes you sleepy after a big meal."

But, unlike a computer, the autonomic nervous system is not "hard wired." It can change. Nerve fibres can grow under certain conditions. For example, when nerves are injured, new nerve fibres can sprout and make contact with nerves that control sensory information. When this happens, people may feel tingling, burning sensations or pain.

For 25 years, research from Smith's laboratory has contributed to the understanding of the autonomic nervous system. He was the first to use quantitative biophysical methods to analyze the effects of injury on the electrical activity of peripheral neurons. His findings have provided a better understanding of how the autonomic nervous system affects transmission of messages from sensory nerves. In turn, this has shed light on the understanding of pain resulting from peripheral nerve injury. These kinds of injuries commonly result from car accidents, or surgery.

Smith also discovered that drugs affect damaged nerves very differently from



Dr. Peter Smith, alias "Dr. Frog"

healthy nerves. Morphine, commonly used to treat chronic pain, doesn't work well with nerve injury, he says. "One treatment for serious pain is to inject drugs into the spinal cord," says Smith. "But rather little

is known about how those drugs work. One technique we are developing is to do detailed analyses of nerve cells in the spinal cord and how painkilling drugs affect them. Little has been done in this area because it's technically extremely difficult." His team will pursue studies in this area during the coming year.

Smith, who has been at the University of Alberta since 1980, has presented his findings in invited lectures at 35 different institutions around the world. The Medical Research Council of Canada (MRC) supports his research consistently and ranked his latest grant application #1 out of 37.

As pharmacology's graduate program coordinator for eight years (1988-96), Smith emphasized recruiting high quality students and involving them in decisions concerning their program. This year, in addition to teaching several graduate courses, he enjoys having the opportunity to spend more time with undergraduate students. And he is particularly gratified by an increasing interest shown by clinical departments in collaboration.

A prolific author with articles in many refereed journals, Smith is currently co-authoring a book about the autonomic nervous system.

In his spare time, Smith may be found camping, skiing, or volunteering with his son or daughter's Scout group. If you attended last summer's Fringe Festival, you may have caught him playing bass guitar with one of the shows.

And the license plate "Dr. Frog"? It was a gift several years ago in honor of the thousands of hours Smith spent in his early research using frogs. ■

El Nino brrrrr-ings back nice weather

By Deborah Johnston

The warm, dry December we enjoyed was caused by the weather phenomenon, El Nino, says mathematical sciences professor Dr. Gordon Swaters, not by global warming. "People shouldn't think El Nino is the result of humans forcing of the climate system...It isn't anything out of the ordinary. As long as we have been able to keep records and probably before, El Nino has been occurring."

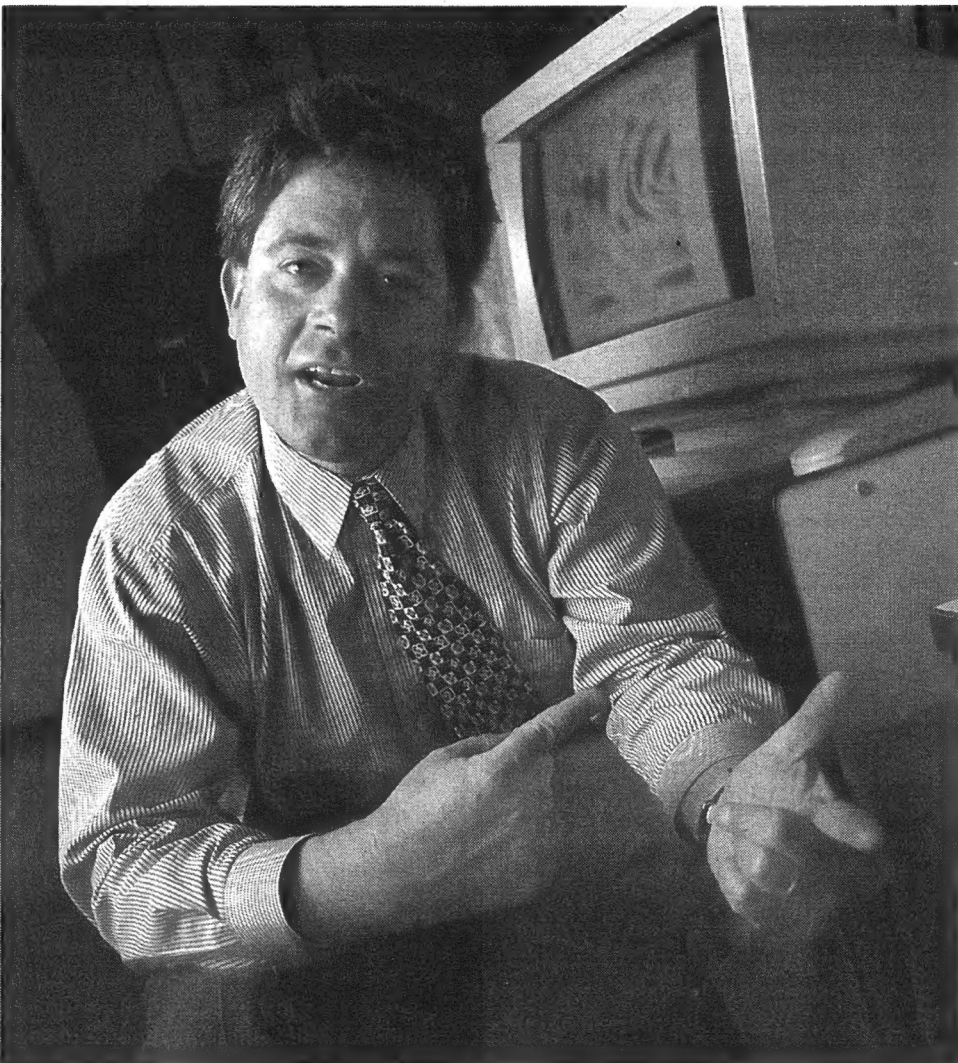
The first clear observation of El Nino seems to have been recorded about 400 years ago, Swaters says. South American fisherman noticed the tiny anchovies that usually teemed in the coastal waters would periodically disappear. The fish seemed to vanish every few years around Christmas, bringing the fishing business to a sloshing halt.

Swaters—who jokes that by virtue of the 'water' in his name, he was doomed to do fluid dynamics—has studied the El Nino phenomenon. His research team is trying to understand the stability of large scale flows in the ocean and in the atmosphere. In fact, the University of Alberta's math department is the only one in the country to have its own fluid dynamics lab.

"We understand the *what* of El Nino," Swaters says, "we don't understand the *why*." We know that El Nino is a "lovely coupling between the currents in the tropical Pacific Ocean and the winds which blow above." As for why it happens in five to seven year cycles, however, Swaters admits it's still a mystery.

What is clear, he says, is that El Nino occurs when the trade winds, which create westward flowing ocean currents, suddenly stop—and it only happens in the Pacific Ocean. Speculation among researchers is that the Atlantic Ocean is too narrow to allow this effect.

Typically, Swaters explains, Pacific trade winds blow from east to west across the oceans, creating currents which travel



Dr. Gordon Swaters

from South America over to Southeast Asia. The water literally piles up in the western Pacific. "So if you thought about it," Swaters says, "the surface of the ocean is a bit like a tilted plane where the water is higher in Asia than it is in South America." (The effect is similar to a fan blowing across a bathtub full of water).

Then, "for reasons we don't understand, these winds stop. They just subside. So the force which created this incline is now gone." With nothing to hold it up, the water rushes back to the opposite shore, like the water in the bathtub would if the fan were suddenly switched off. (That explains the South American anchovy dis-

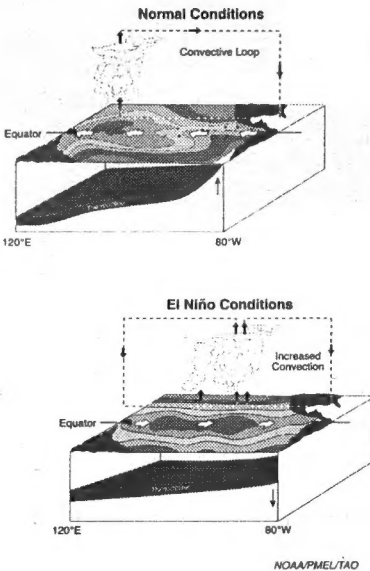
"What we saw in December was classical

El Nino...about the strongest we've seen

in the last 150 years. This is the real thing."

—Gordon Swaters, professor of

mathematical sciences



appearance—they don't like the warm water returning from Southeast Asia).

The maximum effect is around Christmas, hence the name El Nino, Spanish for "little one."

The effects of El Nino can reach across the globe because of the enormous redistribution of warm ocean surface water. That, in turn, affects winds throughout the world. In our case, El Nino typically makes winters milder because the jet stream is pushed northward, allowing warmer southern air to cover us.

Occasional very cold air will still creep in, but El Nino will shorten its duration.

"We're in a nice part of the world for this," Swaters say. "We benefit from El Nino. Our winters are less severe." Other parts of the world also feel the impact of El Nino—but with disastrous results: "Over in Indonesia and Australia, they have horrible forest fires because the conditions become very dry since the amount of rainfall they get is diminished. And we think that the severity of the ice storms in Eastern Canada could be related to El Nino."

By disrupting normal agricultural systems and causing property damage, El Nino has profound economic influence, Swaters says, about 10 billion dollars in a given year.

"Maybe what we should do—because we're never going to stop it, forget it—is plan for it," Swaters says. "By better understanding the dynamical processes resulting in El Nino, maybe we can make better predictions about when it will occur and what will be the impacts." We know from past history that during El Nino winters the risk of forest fires in Southeast Asia increases.

Swaters notes there are predictable benefits to El Nino as well. Wheat production seems to be enhanced in Western Canada in the years following El Nino; "maybe farmers could exploit that."

We can't stop El Nino, but it seems we can speed it up. Swaters says El Nino's five to ten seven year cycle may be shortening and the increase, not the El Nino itself, may be due to global warming.

The next El Nino should blow into town sometime over the next seven years, although Swaters says there's no way to say for sure. "It could be next year, but it could also be a decade away."

Ideas and role models for success

Engineering Orientation Program taps best across campus

By Judy Goldsand

Using techniques like these give vitality to your teaching. That was the message top notch professors, Connie Varnhagen (psychology) and Cheryl Cox (pharmacy), gave to new professors in the Faculty of Engineering.

Varnhagen and Cox were invited to share their expertise in an orientation session on "Alternate Teaching Styles," one of a series of 13 sessions offered by the Faculty of Engineering to professors hired during 1997.

This is the second year the faculty has offered an intensive orientation program to new professors. Expecting to replace one third of the faculty's 120 continuing academic staff over three years, Dean David Lynch is intent on giving new staff members opportunities to improve their teaching and research effectiveness.

"We want our new professors to stay with us," says the dean. "So it makes sense to help them develop their teaching and research skills. Everyone benefits. Our students gain superior instruction, and new professors gain confidence and, down the line, satisfaction from good evaluations."

Topics covered during orientation include: defining course objectives, setting and marking exams, fairness in evaluation, dealing with large classes, alternate teaching and learning styles, teaching problem solving, and supervision of graduate students.

When Martin Guay joined Chemical and Materials Engineering last summer, he had previously taught only one course. "These sessions are really valuable," he says. "They give us a cross-section of what it is we need as new professors."

Jingli Luo was hired in Chemical and Materials Engineering in 1995, a year before the intensive orientation program started. She heard from her new colleagues how worthwhile the orientation experience was and wanted to attend. So she was

Tutorials on the internet.

On-line simulations.

Computer conferencing.

Problem-based learning.

delighted to have been accepted for the current program.

"The series has been revised based on our feedback last year," says Jim McMullin (Electrical and Computer Engineering), who is coordinating the 1997-98 sessions in conjunction with last year's coordinator, Suzanne Kresta (Chemical and Materials Engineering).

"We are not running as many sessions as last year," says Kresta. "We started in

September with seven talks and a series of six began this month. They are generally well attended. Because people's lives are so busy, sessions are scheduled at noon with lunch provided."

"Most new professors come here without much background in teaching methods," says McMullin, "so we have a number of sessions that focus on learning theories." Some departments have an informal mentor system as well, where experienced professors help their new colleagues.

Each department handles it a little differently, says Kresta. "Last year in our department I enlisted the help of the student club. Half way through the term, club members went to new professors' classes and asked students, in confidence, about what was going well or not so well. The information was shared only with the professor who then had a chance to make changes. One professor who got a poor student evaluation mid-year had, by the end of the year, received one of the best evaluations. Good evaluations reinforce your satisfaction in teaching and make you want to be even better, she says.

New profs come away from the orientation program with a set of new ideas and the acquaintance of professors who've already proved their mettle in their respective fields. "We hope," says Kresta, "having already met them will make it easier for our new faculty members to contact them again for additional advice."

Eighty years filled with firsts

The Faculty of Nursing celebrates its 80th Anniversary with a kick off January 28

By Lee Elliott

From Girl Friday, to the 60s film sex symbol to today's careerists, the image of nurses has changed dramatically since 1918 when the U of A became the first university in Canada to provide nurses education.

In general, though, the harder the times, the better nurses look, says Dr. Janet Ross-Kerr, professor of nursing. "During periods when there have been problems like wars, the image of nurses has gone way up."

But the role of nurses has changed every bit as dramatically as their image. "I think the women's movement is an important factor," says Ross-Kerr, "but I think the evolution of health-care has expanded the nurse's role."

"There's an incredible number of patient support systems out there that nurses have to work with in patient care." Technology has made much equipment such as breathing and intravenous apparatuses more complex. X-rays can be transmitted by satellite. "You need to have someone who really is on top of that as well as being a caring empathetic person," says Ross-Kerr.

Graduates of the master's program are now involved in assessment and diagnosis and guidelines are being developed for those nurses to prescribe drugs. "You have nurses functioning at almost beyond the practice of the general practitioner a number of years ago," says Ross-Kerr.

Spin off professions have also developed. Both midwifery and physiotherapy used to be a regular part of nursing practice.

A look at the early history shows there's not much nurses didn't do. Dr. Sharon Richardson, who's completing a history of the nursing education at the U of A, says in the early years, nurses were trained to be primarily public health and



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University of Alberta Archives



University of Alberta Archives

district nurses. Both became a critical support for the infant province.

The public health certificate offered in 1918 was an answer to pressure from the Alberta Farm Women's Association—led by one of Canada's first feminists, Irene Parlby. Nurses in the program were already graduates of a hospital nursing school and were sent throughout the province with a legislative mandate to "inspect" its children.

Nurses looked for infections in the upper respiratory tract, dental caries, and signs of malnourishment, for instance, and then parents were required by law to correct the problem. "It wasn't so much health promotion as an inspection, looking for 'defects,'" says Richardson. "Of course we were attempting to Anglo-Saxonize the non-Anglo-Saxon immigrants."

In 1919, the District Nurses Act sent nurses to rural Alberta to play a more active role. "Alberta had the highest infant mortality rate in Canada at the time," says Richardson. The nurses were specially trained in obstetrics and "were legally empowered to provide midwifery and

emergency services where there was no physician or hospital." Laura Attrux epitomized these early nurses. She was awarded an honorary U of A degree for the spirit that saw her buy her own plane to cover the vast territory from the Peace River area to Fort McMurray.

FACULTY OF NURSING HIGHLIGHTS

The following was taken, in part, from and expanded story line written by Dr. Sharon. She is currently completing a book on the history of nursing education at the U of A to be launched Reunion Weekend, October 3, 1998.

1918: The University of Alberta becomes the first university in Canada to provide education to nurses. These were certificate courses in public health nursing for nurses who had graduated from hospital training programs. The impetus for the program came from Irene Parlby, first president of the United Farm Women of Alberta and one of the "Famous Five" women whose court challenge brought Canadian women the vote.



Glenbow Archives NA-3956-1

1923: The U of A institutes a three-year nursing diploma program.

1923: First degree program begins. Both the diploma and the degree programs were intended to provide student labor for the Strathcona Hospital, purchased in 1922 and renamed the U of A hospital.

1943: Advanced practice obstetrical certificate program launched.

1975: First masters program in nursing introduced in Alberta

1989: Only Philosophical Institute for Nursing Research in the world is established.

1996: First nursing program in Canada to establish and associate dean of teaching position. ■



University of Alberta Archives 95-71-453

Photos (top, clockwise):

Nurse examining child at 1928 travelling health clinic.

Centre right: Student nurses 1940s

Bottom left: Kate Shaw Colley (Brighty), 1919 grad heads to duties in Onoway

Bottom right: Agnes Macleod first full-time director of the School of Nursing from 1937-1945

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and Immunology
Faculty of Medicine and Oral Health Sciences

The Awards Ceremony will be held
on

Tuesday, 3 March 1998 at 4:00 pm
Timms Centre for the Arts

Reception will follow

Please watch *Folio* in February for features on these
two outstanding researchers.

Yes Virginia, there really is global warming

By Debby Waldman

This is the sixth lecture in a series of interdisciplinary environmental lectures sponsored by the TransAlta Environmental Research and Studies Centre.

Around this time of the year, when the air turns so cold that icicles form on your eyebrows and the lock on your car door freezes, the concept of global warming might not seem so terrible.

But according to Dr. David Schindler, Killam Professor of Ecology, global warming isn't as simple as "warmer is better." "A degree or even less than a degree is going to have a big effect," Schindler said in a recent talk, "Effects of Climate Warming, Ultra Violet Radiation and Acid Deposition on the Boreal Region." As the climate warms, as it has been steadily since modern climate records have been kept, "evaporation and transpiration from vegetation increases, so a significant increase in precipitation is needed to keep things from getting too dry," Schindler explained.

The problem with the predicted warming trend is that precipitation is unlikely to compensate for increases in the atmospheric carbon dioxide that's causing temperatures to slowly creep up.

Schindler has been observing the effects of increased evaporation in the Experimental Lakes Area in northwestern Ontario during the last 30 years. In the early to mid-1970s, three streams he was studying contained water throughout the year. Eventually they began to dry up, and by the late 1980s, were dry for 150 days of the year.

That doesn't bode well for aquatic organisms, but dried-up waterbeds are only one problem. Changing chemical composition of both streams and lakes is also having irreversible effects.

As an example, Schindler cites a lake in his research area that used to be home to lake trout and mysis, a large crustacean that eats plankton and provides food for the trout. Both species thrive in temperatures below 15 centigrade. As a result of

the increasing lake temperature, the zone for lake trout is shrinking. In the lake Schindler studied, trout are decreasing and being replaced by a significant increase in pike. In addition, decreased inputs of phosphorus to the lake caused the overall fish stocks to decline.

Warming also affects water renewal of lakes. Lakes that were once being flushed out every five years now require up to 20 years, which means higher chemical concentrations.

"Eventually," Schindler said, "We could get to the point where some lakes might not flush at all."

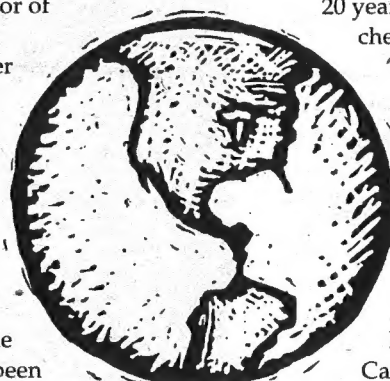
Increased temperatures are also taking a toll on forests, leaving them more susceptible to widespread burns.

Between 1970 and 1990, Canada's fire record showed nearly twice the area burned per decade as from 1940 to 1970, Schindler said. In the 1980s alone, fire took more than twice as many trees as clear cutting which, at that point, was at an all-time high. "Some storms will have thousands of lightning flashes, and then little precipitation might fall," Schindler said.

After a fire, there's lots of dead carbon in the form of fire-killed trees. Eventually jackpine, poplar and willow trees begin to sprout. Six years after a massive fire in the early 1970s, jackpine had grown to six to seven feet in the Experimental Lakes Area, but the region was literally a tinderbox as a result of the continued drought.

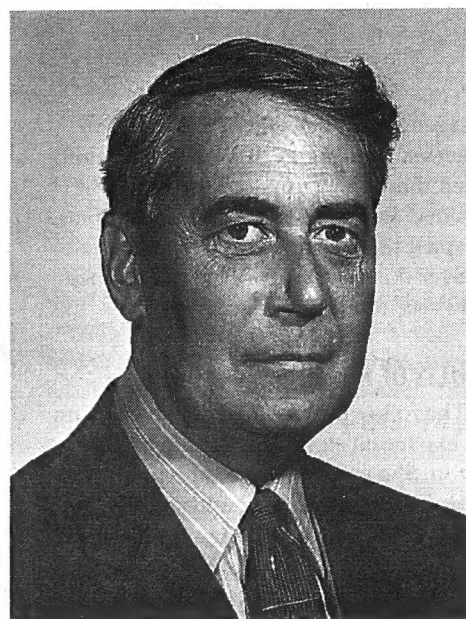
Yet despite what appears to be overwhelming evidence, even the scientific community doesn't completely agree about the magnitude of global climate change. "No scientist is going to tell you with 100 per cent certainty that the planet is warming," Schindler said, "but they will tell you that there is strong evidence that it is, and if it does, we're in big trouble."

Schindler, however, is a believer. Asked if there was anything about which society can be optimistic when it comes to global warming, he is frank. "I have a hard time being optimistic," he said. "I don't think climate change predictions are wrong." ■



OBITUARY

Dr. John Kenneth Martin



Dr. John Kenneth Martin, former chair of the U of A Department of Pediatrics, died recently at his home at Moses Point, Sidney, BC.

Martin graduated from medicine at Guys Hospital, London, England in 1941 and immigrated to Canada after four years

military service and post-doctoral work. He joined the U of A in 1957.

Prior to his appointment, pediatrics was a small division in a powerful and long-established Department of Internal Medicine. Neonatology was entirely in the hands of the Department of Obstetrics. Martin helped persuade administration and the departments involved to establish a distinct pediatrics department. In a history he wrote of the department from 1919 to 1992, he described the activities of that time: It was a time of staff recruitment, the creation of graduate training, complete revision of undergraduate training, modification of laboratory and radiological services to make them appropriate for children, the organization of general and specialty out-patient clinics and other child-care requirements now taken for granted.

His greatest success was in the consolidation of services for children with long-term disabilities in what later became the Glenrose Hospital.

In 1971, Martin left the U of A for Victoria B.C. and an appointment as director of medical services at Glendale Lodge a residential rehabilitation and training facility for individuals with mental handicaps. ■

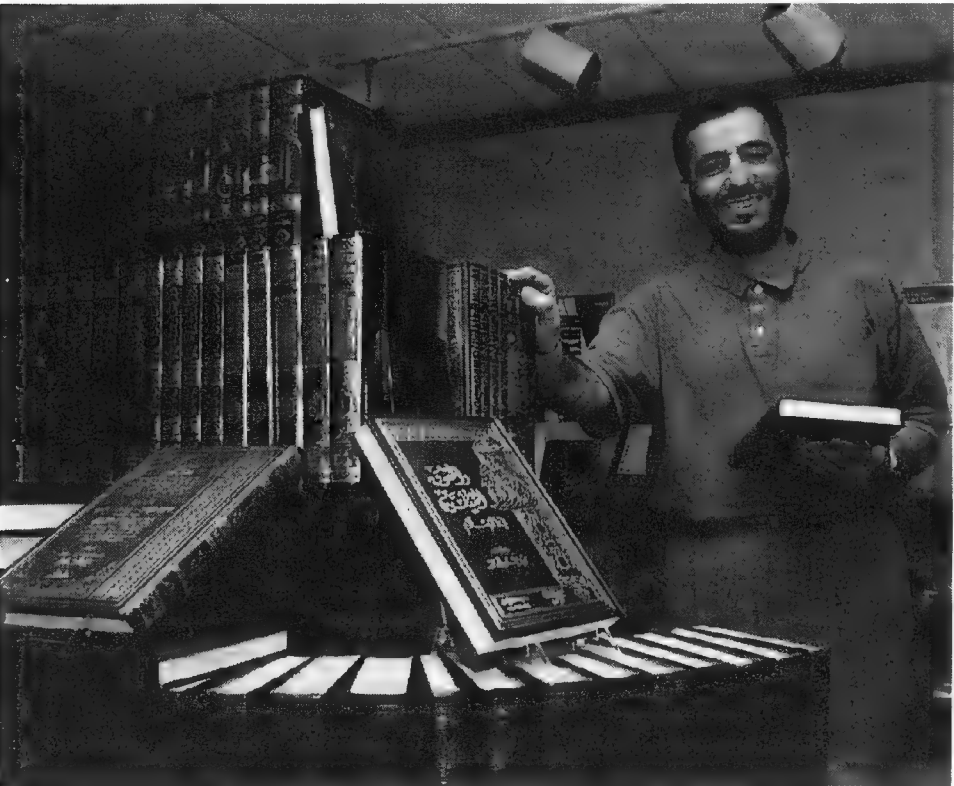
Unique gift boosts Rehab Medicine

The Faculty of Rehabilitation Medicine got a financial boost today with a donation from the College of Physical Therapists of Alberta (CPTA). The gift, a \$100,000 interest-free loan, will be directed towards the Rehabilitation Research Wing and the FIRST Fund (Fund for the Investment of Rehab Students' Training.)

CPRA President Brent Kassian says "This is a win-win situation—the U of A

can continue to attract the best and brightest students, while the college benefits from the education which our future members receive and which prepares them for work in clinical practice."

Al Cook, dean of the Faculty of Rehabilitation Medicine, said the gift from the college is a continuation of its long time support of the faculty's program. ■



Books for the Library

Dr. Saleh al-Abd al-Wahid, a Saudi physician, is doing postdoctoral work at the University of Alberta Hospital. He noticed an absence of holdings in Arabic in the U of A's Library, particularly in sources related to the Qur'an and early Islamic history. He contacted a private individual in Saudi Arabia who arranged for these classical sources to be given to us: The "mountain of books" is comprised of Qur'anic commentaries, histories, classical discussions on Islam and the Qur'an.

1998-99 KILLAM ANNUAL PROFESSORSHIPS

Applications for the 1998-99 Killam Annual Professorships are now available. All regular, continuing, full-time, academic faculty members who are not on leave during 1998-9 are eligible to apply. Deans, Department Chairs and other senior University administrators shall not normally be eligible for Killam Annual Professorships. Up to eight Killam Annual Professors will be selected by a subcommittee of the Killam Trusts Committee; no more than two Professorships shall be awarded to staff members in any one Faculty. Each Killam Annual Professor shall be presented with a \$2500 prize and a commemorative scroll. The duties of Killam Annual Professors shall not be changed from those that they regularly perform as academic staff members.

The primary criterion for selection shall be a record of outstanding scholarship and teaching over three or more years, as evidenced by any or all of research, publications, creative activities, presented papers, supervision of graduate students, and courses taught. The secondary criterion shall be a substantial contribution to the community beyond the university by linking the applicant's university responsibilities and activities to community needs and/or development.

Awards are tenable for twelve months commencing 1 July 1998. The completed application must be received in the Office of the Vice-President (Research and External Affairs), 3-12 Uni-

versity Hall, by Friday 27 February 1998 at 4:30 pm, attention Katharine Moore. The awardees shall be announced by early May, and they will be formally recognized at the Killam Dinner in the autumn of 1998 which is hosted by the Faculty of Graduate Studies and Research.

Applications and further details are available on the home page of the Vice-President (Research and External Affairs) at : <http://www.ualberta.ca/~univhall/vp/vprea>.

Please contact Annette Kujda, Administrative Assistant, Office of the Vice-President (Research and External Affairs) at extension 8342 or email: annette.kujda@ualberta.ca if you have any questions.



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☐ 60,000 ☐ 90,000 ☐ 110,000 or ☐ 140,000?

Congratulations to Al Kalantar (Chemistry) and Kat McLeod (Education) who won tickets for two to hear Martin Riseley, violin, with the ESO Jan. 23.

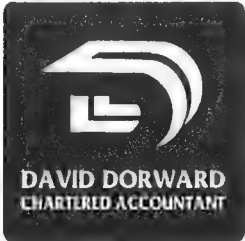


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ALBERTA CENTRE FOR GERONTOLOGY

January 26, 7:30 p.m.

Allison Bonner, Graduate Student, Physical Education and Recreation, "Physical Activity, Aging and Alzheimer's." 2-07 Corbett Hall.

ALBERTA CENTRE FOR WELL-BEING

January 26, 4 p.m.

Art Quinney, Wendy Rogers and John Spence, "Physical Activity Interventions: Moving from Research to Practice." Update from the Cooper Institute Specialty Conference. Room E-120 Physical Education Building.

ALBERTA HERITAGE FOUNDATION FOR MEDICAL RESEARCH

January 26, 10 a.m.

John Glover, Postdoctoral Fellow, Howard Hughes Medical Institute and Department of Molecular Genetics and Cell Biology, University of Chicago, "Protein Aggregation in Yeast: The Role of Hsp 104 in Prion Maintenance and Thermotolerance." Presented by Cell Biology and Anatomy. 5-10 Medical Sciences Building.

February 2, 10 a.m.

Margaret Sonnenfeld, Postdoctoral Fellow, Department of Biochemistry and Biophysics, School of Medicine, University of North Carolina at Chapel Hill, "Tango is a bHLH-PAS Transcription Factor Essential for Development of Cells in the Embryonic Central Nervous System and Trachea." Presented by Cell Biology and Anatomy. 5-10 Medical Sciences Building.

ASSOCIATION OF PROFESSORS EMERITI

January 29, 7 p.m.

Don Bellow, Engineering, "The Impact of Technology." Part of the A.P.E. "An Evening with..." series. 11034-89 Avenue

BIOLOGICAL SCIENCES

January 23, 4 p.m.

Tom Petes, Biology, University of North Carolina, "Genomic Instability in Yeast: The Cancer Connection." Sponsored by the Alberta Heritage Foundation for Medical Research. M-145 Biological Sciences Building.

January 29, 3 p.m.

Bernard Crespi, Biological Sciences, Simon Fraser University, "Systematics as Guide to Evolutionary Pattern and Process." M-141 Biological Sciences Building.

Ecology Seminar Series

January 23, noon

James Dalby, Bates College, Main, "Do Ice Cover and Food Supply Affect Growth of Arctic Brittlestars?" M-229, Biological Sciences Building.

Molecular Biology and Genetics Research Group

February 6, 4 p.m.

Luc Berthiaume, "Protein Palmitoylation: New Roles in Cellular Signalling and Metabolic Regulation." G-116 Biological Sciences Centre.

CANADIAN INSTITUTE OF UKRAINIAN STUDIES

January 226, 3:30 p.m.

David Marples, "Ukraine and Belarus: A Comparison of Two Emergent Nations in the Post-Soviet Era." CIUS Library

February 3, 3:30 p.m.

Colin Neufeldt, "The Mennonite Experience during the Collectivization Period in Ukraine and the Crimea." CIUS Library

February 6, 3:30 p.m.

Mark von Hagen, Columbia University, "The Russian Imperial Army and the Ukrainian National Movement of 1917." CIUS Library

CAREER AND PLACEMENT SERVICES

January 27, 4 p.m.

Political Science Career Forum, Tory B-95

January 28, 1-5 p.m.

Aboriginal Career Fair, Dinwoodie Lounge 2-000 Students Union Building.

January 28, 6 p.m.

International Business Career Forum, Business 1-5.

January 29, 5:30 p.m.

Sociology Career Forum, Tory B-95

January 29, 6 p.m.

Languages / Linguistics Career Forum, Humanities L-4

February 3, 6 p.m.

Finance and Management Science Career Forum, Business 1-6

events

INTERNATIONAL WEEK CELEBRATIONS

OPENING CEREMONY

Friday, January 23, 12:00 - 1:00 p.m.

HUB International Marketplace in front of the mural

Celebrate the beginning of International Week '98! Groove to the beat of the Wajjo Drummers and indulge in the melodies of the University of Alberta Concert Choir.

The Wajjo Drummers will perform from 12:10 - 12:30 p.m. and the Concert Choir will perform from 12:30 - 12:50 p.m. All are welcome!

EXHIBITS

Monday, January 12 - Friday, January 30 HUB

International Marketplace

Forget your program guide at home? Check the International Centre's display case for information on sessions and activities running throughout the Week.

INTERNATIONAL WEEK POSTER EXHIBIT

Monday, January 12 - Friday, January 30 HUB

International Marketplace

Check out this unique collection of 10 posters. These color mock-ups were submitted as visual concepts for International Week '98. Thanks to the Visual Communications and Design 592 class and their professor Lara Minja for their creativity in producing ideas for the Week's image. The image selected this year was designed by Nancy Romaniuk.

ACTIVITIES OF THE AGA KHAN FOUNDATION (AKF)

Monday, January 12 - Friday, January 30 HUB

International Marketplace

This display shows some of the activities of AKF in Asia and Africa in rural development, health care, education, gender equity, preservation of the environment, and development of small enterprise.

AMNESTY'S 25TH ANNIVERSARY CELEBRATION

Monday, January 12 - Friday, January 30 HUB

International Marketplace

1998 marks the anniversary of the United Nation's adoption of the Universal Declaration of Human Rights and the 25th anniversary of Amnesty

International in Canada. Given this, Amnesty International is holding a one-year campaign to celebrate the achievements of human rights activists in Canada and around the world. Amnesty looks forward to the opportunity to work with you to reaffirm the principles of the Declaration and to make human rights a reality for everyone.

FAIR TRADE - UNFAIR TRADE

Monday, January 12 - Friday, January 30 HUB International Marketplace

Human rights are not always built into job opportunities. Many items the first world consumes on a daily basis are made under unfair working conditions that exploit men, women, and children. This exhibit, organized by the Department of Human Ecology, reveals alarming facets of the life-history of consumables which are advertised as necessary to average, first-world consumer happiness, well-being, and social success. Unfair labour practices occur frequently in nations of the North as well as the South.

PHOTOGRAPHS FROM NICARAGUA

Monday, January 12 - Friday, January 30 HUB International Marketplace

Instruments of Change is a grassroots project which facilitates exchange between artists, youth, and teachers from Central America and Canada. The emphasis of the project is on empowering people of lesser means with the necessary tools for artistic and cultural expression. The photographs featured in this exhibit were taken on the Change for Children tour to Nicaragua in the summer of 1997.

GLOBALIZATION AND HUMAN RIGHTS: AN EDUCATIONAL EXHIBIT

Monday, January 26 - Friday, January 30 International Centre Lobby

This exhibit, organized by graduate students from the Department of Educational Policy Studies, is designed to raise awareness and understanding of the impact of globalization on the state of human rights in local, national, and global contexts. The exhibit includes a collage of posters, text, pictures, and other audiovisual material. Volunteers will be present to dialogue with viewers from 11:00 a.m. - 2:00 p.m. daily.

February 4, 5 p.m.

History and Classics Career Forum, Humanities 1-7

CENTRE FOR GERONTOLOGY

January 26, 7:30 p.m.

Renate Sainsbury, "Therapeutic Value of Play and Laughter." 2-07 Corbett Hall.

ECO-RESEARCH CHAIR IN ENVIRONMENTAL RISK MANAGEMENT

February 6, 3 p.m.

Gerald Wilde, Department of Psychology, Queen's University, "Risk Homeostasis Theory: An Overview." 2F1.04 (Classroom D), Walter C. Mackenzie Health Sciences Centre.

FACULTÉ SAINT-JEAN

January 29, 7:30 p.m.

Claude Denis, "Speak White? Le colonialisme face aux peuples amérindiens." Room 1-01 Faculté Saint-Jean.

NURSING

January 30, noon

Paul Byrne, "Ethics in the Trenches." Sponsored by the John Dossetor Health Ethics Centre, 2nd Floor Library, 222 Aberhart Nurses Residence, 8220-114 St.

February 6, noon

Lynn Skillen, "Learning Contracts for Self-Directed Learning." 6-102 Clinical Sciences Building.

PHILOSOPHY

January 23, 3:30 p.m.

Les Green, Philosophy, York University, "Pornographies." L-3 Humanities Centre.

PHYSICS

February 5, 4 p.m.

Brett Gladman, "The Discovery of Two Distant Moons of Uranus." Chemistry E1-60

POLITICAL SCIENCE

January 29, 3:30 p.m.

Dave Whitson, "The Globalization of Entertainment and Culture of the City." 10-4 Tory Building.

PUBLIC HEALTH SCIENCES

January 21, noon

Tom Noseworthy, "Better Information for Better Health." Classroom D (2F1.04 Walter Mackenzie Health Sciences Centre.)

January 28, noon

Cam Wild, "Status Variables Versus Client Perceptions in Health Behaviour Change." Classroom D (2F1.04 Walter Mackenzie Health Sciences Centre.)

February 4, noon

Graham Gibbs, "Fibres and Health." Classroom D (2F1.04 Walter Mackenzie Health Sciences Centre.)

RENEWABLE RESOURCES

January 29, 12:30 p.m.

Naomi Krogman, "Conflict Over Landscapes: Sociological Approaches." 2-36 Earth Sciences Building.

February 5, 12:30 p.m.

David Gifford, "The Conifer Seed: Barriers to Germination and to Early Seedling Growth." 2-36 Earth Sciences Building.

ST. JOSEPH'S COLLEGE

January 25, 7:30 p.m.

The Catholic Passions Series. "Violence in Relationships?" Film: "Love Taps." Presented by Rose Marie Hague and panel. Newman Centre, St. Joseph's College.

UNIVERSITY OF ALBERTA CHAPTER SOCIETY OF THE SIGMA XI

January 28, 7:30 p.m.

Douglas Hube, "The Binary Stars: Celestial Pas de Deux with Fireworks." 2-35 Corbett Hall.

UNIVERSITY TEACHING SERVICES

January 27, 3:30 p.m.

Maggie Haag, "Peer Mentor Programs for Graduate Students." 281 CAB.

January 28, noon

Roberta McKay and Katherine Wilson, "More Work? Less Stress? Try Collaborative Teaching!" 219 CAB.

January 28, 3 p.m.

Larry McKill, "Tips for Marking Written Assignments Precisely, Clearly, and Efficiently." 281 CAB.

January 29, 3:30 p.m.

Randy Garrison, "Rethinking the Teaching-Learning Transaction: Adult Learning in Higher Education." TB-W2 Tory Breezeway.

February 2, noon

Walter Allegretto, "Graduate Student Supervision." 219 CAB.

February 2, 3 p.m.

Rick Bowers, "Seminar Teaching and Learning." 219 CAB.

February 3, 3:30 p.m.

Chris Hackett and Bob Hesketh, "Integrating Computers into the Humanities and Social Sciences." 231 Civil-Electrical Engineering Building.

February 4, 3 p.m.

Daphne Read, "Management Inside and Outside the Classroom." 281 CAB.

February 5, 3:30 p.m.

Dave Clyburn, "Effectively Commenting on Students' Essays." TB-W2 Tory Breezeway.

WOMEN'S STUDIES

23 January, 9 a.m.

Barbara Crow, University of Calgary, "Creating Your Own Feminist Homepage." GSB 221.

MUSICAL PERFORMANCES

Monday, January 26 - Thursday, January 29, 12:00 - 12:30 p.m.

HUB International Marketplace in front of the mural. Sponsored by HUB International Marketplace administration and merchants Join various performers for a free lunch-time concert!

HUB'S ENTER-TO-WIN-BIG INTERNATIONAL WEEK CONTEST

Enter to win between Friday, January 23 and Friday, January 30. The prize will be drawn at 12:00 p.m. on Friday, January 30 in HUB International Marketplace in front of the mural. For details call 492-5609.

INTERNATIONAL WEEK WRAP UP PARTY

Saturday, January 31, 8:30 p.m. - 1:00 a.m. University of Alberta Power Plant

Music and workshop by Lights of the Future. Lights of the Future is a 10 piece salsa band of young Nicaraguans who are coping with the problems of poverty and violence in their country. Lights of the Future is in Alberta as part of the Instruments of Change project. From 9:00 p.m. to 9:30 p.m., members of Lights of the Future will share their experiences of life on the streets of Nicaragua and how they have found self-esteem and passion through music. The workshop is being co-sponsored by Change for Children and the Centre for International Alternatives. Following the workshop, the band will play salsa music. Join in on a well-deserved evening of dancing and fun to wrap up International Week '98.

Advance tickets for \$6 are on sale at the International Centre and Students' Union Information Booths.

EXHIBITIONS

MCMULLEN GALLERY

Until March 2

"Magic Myth and Make-Believe"—an exhibition of the work of twelve local artists in a variety of media. Gallery hours: Monday to Friday, 10 a.m. to 4 p.m., Sunday, 1 to 4 p.m., Tuesday, Wednesday, Thursday, 5 to 8 p.m. (subject to availability of volunteers). Information: 492-8428 or 492-4211. Mackenzie Health Sciences Centre.

SPORTS

BASKETBALL

January 30 and 31, 6:30 p.m.

Pandas vs. Lethbridge

January 30 and 31, 8:15 p.m.

Bears vs. Lethbridge

HOCKEY

January 30 and 31, 7:30 p.m.

Bears vs. Brandon

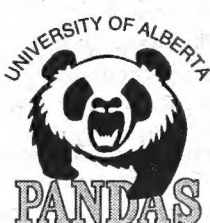
VOLLEYBALL

February 6, 8 p.m.

Bears vs. Calgary

February 7, 6:30 p.m.

Bears vs. Calgary



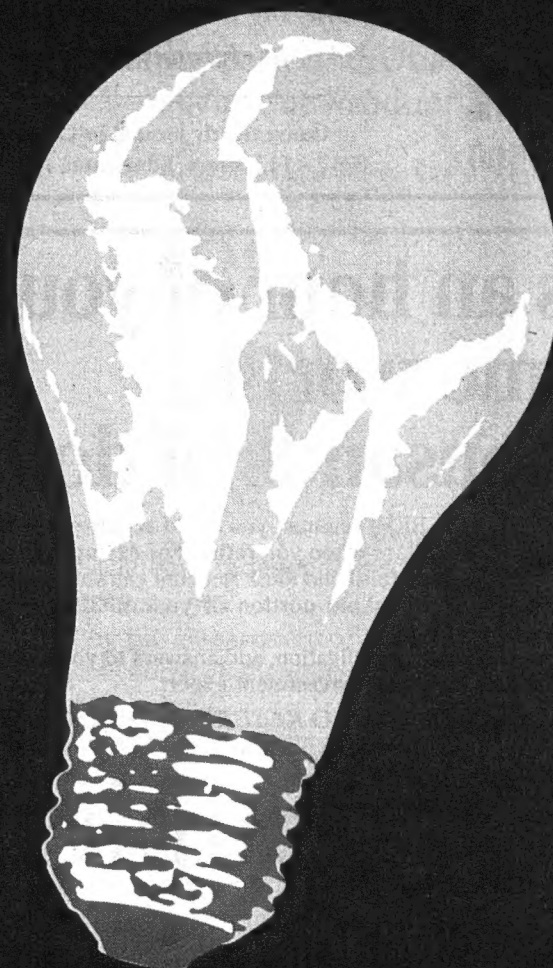
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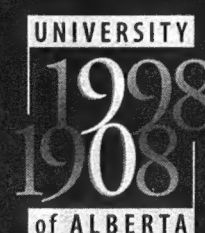
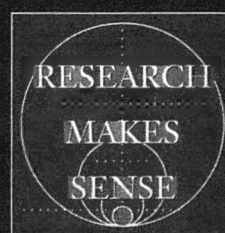
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CHAIR, WOMEN'S STUDIES PROGRAM

The Women's Studies Program in the Faculty of Arts requires a new Chair effective 1 July 1998. The position normally has a term of three years. It is open to all tenured staff with scholarly interests and a strong research record in any area of Women's Studies.

Women's Studies is a degree program in the Faculty of Arts, but draws on teaching and research about women conducted in many faculties and fields of study. It is thus interdisciplinary and collaborative in orientation. Recent recruiting has given the Program the strength to expand its activities. The new Chair will be someone who possesses the creativity and energy to lead staff and students in thinking strategically about the opportunities that the Program's new strength provides, and in accomplishing the goals that this planning process establishes.

The duties of the Chair include providing leadership to the Program, linking it with the campus-wide Women's Studies community and with Women's Studies programs elsewhere, and representing the Program within and beyond the University. The Chair is also responsible for staff and curriculum development, budgeting, general administration, and working with colleagues on such scholarly activities as visiting speakers programs and collaborative research initiatives. Strong administrative skills are therefore essential.

Applications or nominations for the position, supported by a curriculum vitae, should be sent to: The Dean's Advisory Selection Committee, c/o Associate Dean Gurston Dacks, Faculty of Arts, 6-3 Humanities Centre.

The deadline for applications is February, 23 1998.

ASSOCIATE REGISTRAR/ DIRECTOR OF ADMISSIONS

The University of Alberta seeks an energetic, service-oriented professional to manage its admissions and recruitment functions.

The Office of the Registrar and Student Awards provides support systems to 30,000 students and their Faculties. The Associate Registrar/Director of Admissions reports to the Associate Vice President and Registrar, and manages 29 team members.

This position offers variety on numerous managerial fronts. The incumbent is responsible for program planning and directing the following undergraduate student areas: admissions, counselling and recruitment; student awards; University Calendar and

recruitment publications; and admissions policy, procedures and production.

If you are the successful candidate, your background includes extensive admissions and recruitment experience, a master's degree, and proven dedication to customer service. You have expert analytical skills. Your extensive experience with student information systems will be well used in the leadership role you will play in the introduction of a new Student Information System.

The closing date for receipt of applications is March 30, 1998.

Current salary ranges from \$47,908 to \$71,860. Send letter of application, resume and list of three professional references to

Brian J. Silzer

Associate Vice President and Registrar
University of Alberta
Edmonton, Alberta
T6G 2M7

INTERNATIONAL RELATIONS OFFICER—LATIN AMERICA

UNIVERSITY OF ALBERTA INTERNATIONAL, INTERNATIONAL RELATIONS

(Two-year term contract)

The International Relations officer—Latin America (IRO) position is a newly created position which will report to the Director, International Relations, in the office of University of Alberta International. The internationalization of the university is a key strategic initiative of the University of Alberta, and this new position offers excellent opportunities for a well-motivated and enthusiastic individual to assist the U of A to expand relations and activities in Latin America related to the university's strategic goals.

The candidate will have a university degree, work or study experience in Latin America, and fluency in Spanish. Knowledge of Portuguese would be an asset.

The candidate will require good communication skills and the ability to work in cross-cultural settings. Research, analytical and writing skills are necessary.

A written application accompanied by a resume of qualifications and experience should be submitted by February 13, 1998 to Michiko Young, University of Alberta International, 2-10 University Hall, University of Alberta, Edmonton, Alberta, Canada T6G 2J9. Fax: 403-492-1488.

Final gift closes United Way Campaign on a high note

By Chris Floden

A donation in mid-December of \$5,200 has made the 1997 University of Alberta United Way Campaign a winner. The total raised is pennies short of \$239,000, and represents 113 per cent of its goal. This total has only been surpassed on campus in 1992 and 1993.

This campaign has seen more Merrill Wolfe leadership givers than ever before. A leadership giver is classified as one who has donated \$600. This year the University of Alberta's staff has 117 leadership givers, more than any other organization, private or public, in the Edmonton region.

Co-chair Dr. Terry Flannigan said, "this campaign has been a great experience, and I know I speak for the other two co-chairs saying that. We have enjoyed it

so much that we have volunteered to do it again next year."

"The only area that we are not satisfied with is the per cent giving rate, which we have set our sights on next year," says Flannigan. This year's campaign saw a giving increase to 15.7 per cent, but that was short of the goal of 20 per cent.

Lesley Smith, an associate professor from pediatrics, was also a winner. She won the donated grand prize of a trip for two to Kelowna, including airfare, accommodation and a rental car.

This year's campaign was co-chaired by Terry Flannigan, Myrna Snart and Dr. Paul Woodard. Lorna Hallam was the loaned representative. ■

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BELGRAVIA EXECUTIVE CONDO - furnished two bedroom. \$1,350/month. Janet Jenner/Gordon W.R. King Real Estate, 441-6441.

VALLEYVIEW EXECUTIVE - two storey home. Spectacular view, 3,000 square feet. Four bedrooms up, two bedrooms down. Three car garage. Security system. \$1,500/month. Janet Jenner/Gordon W.R. King Real Estate, 441-6441.

RENT OR SALE - Country estate near Devonian Botanic Garden. For details call Janet Jenner/Gordon W.R. King Real Estate, 441-6441.

GRANDVIEW - Exquisite Georgian Colonial. Brick, two storey, four bedrooms. Nanny suite, two jacuzzis, formal living room, dining room, 3,000 sq ft, \$1,800/month. Immediate possession. Janet Jenner/Gordon W.R. King Real Estate, 441-6441.

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EXECUTIVE PENTHOUSE CONDO with gorgeous river valley view, two bedrooms, 1 1/2 baths, \$1,800/month. February 1. Call Janet, 441-6441.

HIGHLANDS - Cozy two bedroom home, half block from La Boheme Restaurant. Main floor totally upgraded. Hardwood floors. Modern kitchen, fireplace. \$850/month. Immediate. Call Janet, 441-6441.

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AVAILABLE MAY 1998-APRIL 1999. Lovely three-bedroom bungalow, Rio Terrace. Large, open, fully furnished. Insulated garage. Nice yard. Near river valley, 10 minutes to University. \$950/month. Cathy or Curtis, 487-4248.

ACCOMMODATIONS FOR SALE

VICTORIA PROPERTIES - Knowledgeable, trustworthy realtor with Edmonton references will answer all queries, send information, no cost/obligation. AHassle-free@ property management provided. (250) 383-7100, Lois Dutton, Duttons & Co. Ltd. #101-364 Moss Street, Victoria B.C. V8V 4N1

UNIVERSITY/GARNEAU - \$167,500. Historic four bedroom, 2 storey, fireplace, original woodwork. Great location, immediate possession. Ed Lastiwka, Royal LePage, 431-5600.

UNIQUE TOWNHOUSE CONDO - overlooking Victoria Golf Course. Two storey, two bedrooms. \$189,900. Gordon W.R. King and Associates. 441-6441.

THREE STOREY, located in Cloverdale across the Muttart Conservatory; gorgeous view of downtown. 468-2185.

JUST LISTED! NO GST. Belgravia executive condos, luxury features, security, underground heated parking; bright south exposures facing a park. Price ranges from \$175,000, \$196,000 and \$289,000. Liz Crockford, Re/Max, 438-7000.

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DOWNTOWN CONDO, river valley view, 1790 ft. Two storey, two bedrooms plus loft. CaroleAnne Brown, Re/Max, 438-7000.

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HOUSESITTER, non-smoking professional. Pets welcome. Character references available. Phone 493-1164, before 5 p.m.

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CASH PAID for quality books. The Edmonton Book Store, 433-1781.

SERVICES

TECH VERBATIM - editing, desktop documents, medical terminology, on campus. Donna, 922-3091.

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NEW TO EDMONTON: call Newcomers Club of Edmonton. Joan, 436-2754.



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notices

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GFC TEACHING AWARDS DEADLINE APPROACHING

The GFC Undergraduate Teaching Awards Committee (UTAC) reminds the University community that nominations are now being sought for the annual Rutherford Award for Excellence in Undergraduate Teaching.

Nominations should be submitted by Faculties to the Secretary of UTAC, 2-5 University Hall. The deadline for receipt of award nominations is Friday, February 13, 1998 at 4:30 p.m.

Anyone who needs assistance and advice in preparing nominations should contact Ms Bente Roed, Director, University Teaching Services, 215 Central Academic Building (492-2826). Information can also be obtained from Ms Joanne McKinnon, Secretary to UTAC, University Secretariat, 2-5 University Hall (492-4715).

CANADIAN FEDERATION OF UNIVERSITY WOMEN SCHOLARSHIP

The Canadian Federation of University Women, Edmonton seeks applications for the 1998 Margaret Brine Scholarship for Women, \$1,000 to \$2,000 in value. Application deadline is March 14, 1998 and application forms are available from Room 105, Administration Building, Faculty of Graduate Studies, University of Alberta.

MACTAGGART AWARD APPLICATIONS SOUGHT

The application deadline for the University of Alberta Sandy MacTaggart Award is February 16,

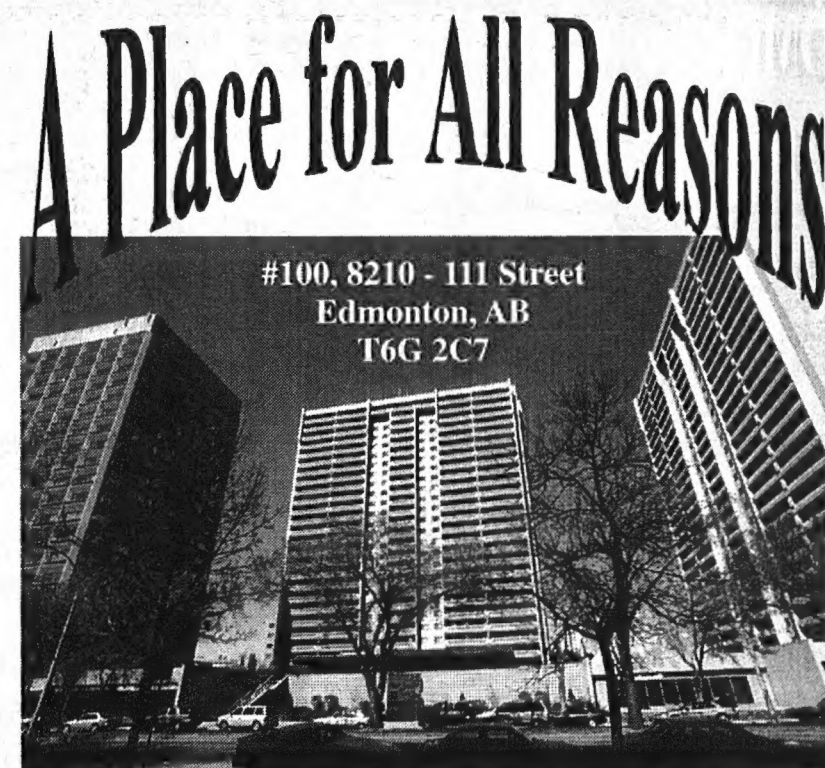
1998. The Sandy MacTaggart Award is given annually to an undergraduate or graduate student to assist them in studying for one year in the Orient as part of a U of A degree. The award will be given to the student who best balances competence, effort and financial need. Applicants must have satisfactory academic standing to apply. Applications are now available in the Student Awards Office, Room 103, Administration Building.

NAVIGATING THE LIBRARY

"Navigating the Library" is a free one-and-a-half hour workshop offered by the University of Alberta Libraries to teach users how to search GATE: NEOS' Libraries Catalogue and available databases. The workshop will be held in the Cameron Microlab, Cameron Library, 1-20 G. Workshops will be held Jan. 27, 11 a.m., Jan. 29, 12 p.m., Feb. 2, 2 p.m., Feb. 4, 10 a.m., Feb. 6, 11 a.m., Feb. 10, 2 p.m. and Feb. 12 at 11 a.m. To register call 492-1571.

U OF A SPORTS WALL OF FAMERS

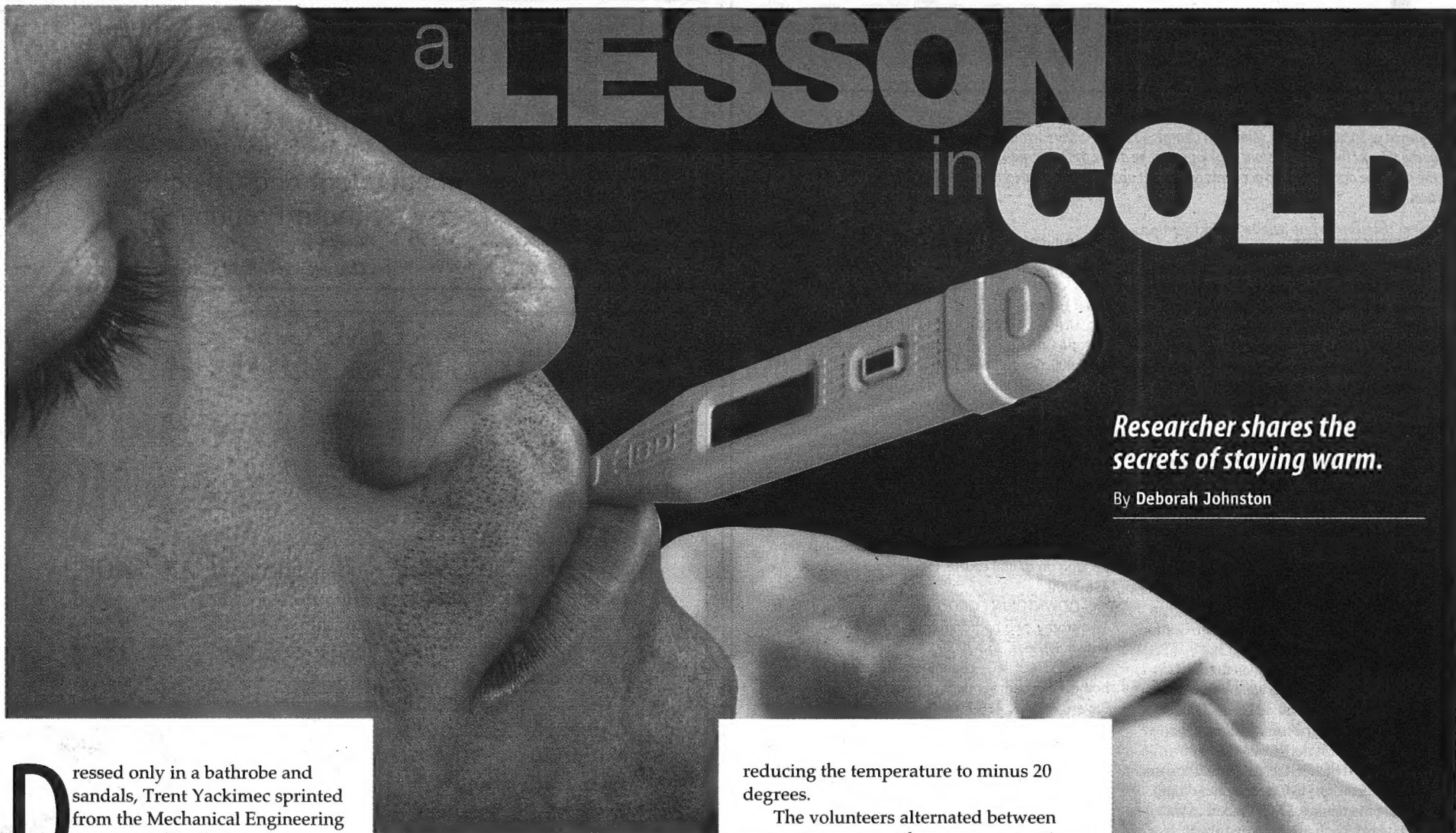
The Faculty of Physical Education and Recreation has announced the 1998 inductees to the U of A Sports Wall of Fame. Gordon Bertie, athlete (wrestling); Donna (Heustis) Enger, athlete and builder (basketball and volleyball); Gino Fracas, builder (football and wrestling); and Dick Wintermute, athlete and builder (hockey and football) will all be honored April 2, 1998 at the Thirteenth Annual Sports Wall of Fame Dinner at the Westin Hotel.



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a LESSON in COLD

Researcher shares the secrets of staying warm.

By Deborah Johnston

Dressed only in a bathrobe and sandals, Trent Yackimec sprinted from the Mechanical Engineering Building to the Quad, in temperatures of minus 20 degrees Celsius. The masochistic dash was part of a stunt for Engineering Week.

Good thing there was no wind, the fourth-year engineering student said, "the only part of me that got cold was my toes."

Yackimec's mad dash was probably what staved off the first sting of cold, says Dr. Larry Wang, professor of biological science. "In our body, we have a furnace—our muscles. The muscles contract, shiver and shake. By exercising, heat will be produced as a byproduct of muscle contraction."

Exactly how a body stays warm is clear, Wang says. "Body temperature is maintained through two processes: one is heat conservation and the other is heat

production." In other words, you can bundle up against the cold or exercise to produce your own heat.

Science has long understood how a body keeps warm, but until recently, did not understand why it sometimes fails—and people die of hypothermia. The human body has plenty of metabolic fuel reserves, particularly fat, Wang says. "One pound of fat can give you 4,000 calories." Even a person of normal weight has enough fat to generate sufficient heat to keep their body warm forever. But for some reason, the body shuts down in extreme cold.

"Hypothermia happens when the heat you lose to the environment exceeds the maximum heat production you can generate," Wang says. "It's defined clinically when the core temperature is below 35 degrees Celsius." After losing just two degrees, symptoms of hypothermia appear: shivering, loss of muscle coordination, hallucinations and behavioral changes. And once hypothermia sets in, Wang says, "it's like a downward spiral towards death. As the body cools, your ability to generate heat is reduced because a colder body doesn't generate as much heat as a warmer body." Shivering stops, the body cools further and eventually the victim's heart fails.

"There's very little you can do to get yourself out of it. It is very dangerous," says Wang. And its onset is imperceptible. "You feel cold, lethargic, you fall asleep and then you die. It's not like you have a warning like a sharp pain. It's peaceful."

Discovering why people with enough fat reserve freeze to death was the focus of Wang's cold tolerance study. Student volunteers—dressed in shorts and T-shirts—spent up to three hours in a room at minus 10 degrees with a blowing fan

reducing the temperature to minus 20 degrees.

The volunteers alternated between rest and exercise, either on a treadmill or a stationary bike. Wang measured their deep core temperature and various skin temperature from the forehead to the chest, thigh, calf, and ankle; and recorded their heart rate, blood pressure and respiratory rate. He also took blood samples to assess the body's physiological response to severe cold.

Wang wanted to know whether we have the capacity to generate enough heat to fight cold. "The experiments done on the human volunteers answer that question very clearly, yes, we do have a very good furnace... We should have no problem whatsoever producing enough heat to keep the body warm. We shouldn't be freezing to death."

The body's furnace is adequate for generating heat and our cardiovascular and respiratory system supply us with sufficient oxygen to fuel cells. "So we have a big furnace, good oxygen supply, what is the problem?"

The problem, he found, is that we have a bottlenecking of our "fuel lines." Something prevents the liquidation of fat into fuel during extreme cold. Instead of working overtime to heat the body, the furnace shuts down, conserving when it should be burning.

"Hypothermia happens when the heat you lose to the environment exceeds the maximum heat production you can generate."

Wang's research identified a molecule called adenosine; the metabolic end product of the energy 'cash' your body spends to stay warm. That energy cash is called Adenosine Tri-Phosphate, or ATP.

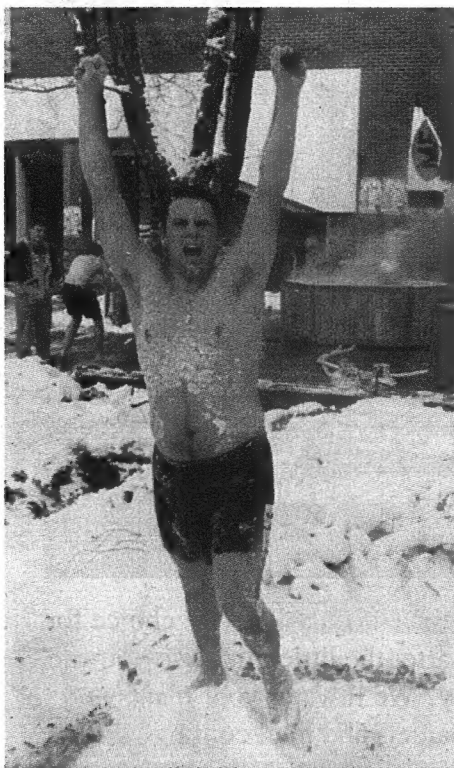
"ATP is the cellular form of cash," Wang says, "no ATP, no work!" Adenosine is like the cash-register receipt or proof of the currency you've spent. And just as a tally of what you've spent can cause alarm and a resolve to spend more wisely, adenosine acts a signal to our bodies to preserve precious fuel. Without fuel, muscles stop contracting and the body cools down.

Wang's much publicized "Cold Buster Bar" was developed to suppress adenosine so the body's fuel line would remain open.

When students in the cold room ate the bar, their cold tolerance improved 50 per cent. Since its introduction to the marketplace in 1991, the Cold Buster bar has earned an outstanding food product of the year award (Gordon Royal Maybee Canadian Institute of Food Science and Technology), and Wang has received an ASTech Award for Innovative Technology.

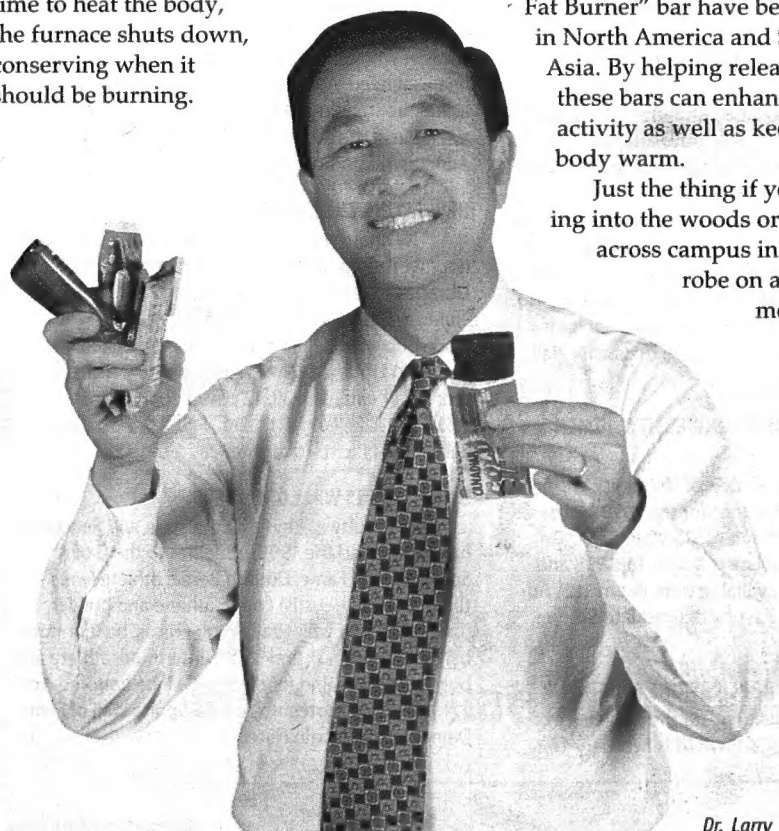
The Cold Buster Bar has since been modified to improve its taste and texture and is now called the "Access Bar." The Access Bar and a similar "Canadian Fat Burner" bar have been marketed in North America and Southeast Asia. By helping release stored fat, these bars can enhance physical activity as well as keeping the body warm.

Just the thing if you're venturing into the woods or dashing across campus in your bathrobe on a frozen morning. ■



Engineering Student Trent Yackimec

folio **back page**



Dr. Larry Wang